The Journal of the American Medical Association

Published under the Auspices of the Board of Trustees

VOLUME LII CHICAGO, ILLINOIS, FEBRUARY 27, 1909 NUMBER 9

Original Articles

FREQUENCY OF TUBERCULOSIS IN CHILDHOOD *

CLEMENS VON PIRQUET, M.D.

VIENNA, AUSTRIA †

If we vaccinate a man for the first time, we see, at the point of inoculation, no specific changes during the first days, but the vaccinal effect is produced only on the third to the fourth day and reaches its maximum on the eighth to the tenth day. When, however, we repeat the vaccination after several months, we find that there appears, within twenty-four hours, a small local inflammation which afterward disappears rapidly. From this early reaction we can diagnose a previous inoculation if we are not informed of the history.

After careful study of these small skin eruptions in cowpox inoculation, I tried the same method in tuberculosis and found that only individuals who had been infected previously with tuberculosis showed within twenty-four hours a local inflammation after the inoculation with Koch's old tuberculin.

It appeared that this skin reaction was, in principle, identical with Koch's febrile reaction after injection of tuberculin and that it corresponds especially to the *Stichreaktion* of the subcutaneous tissue, which has been first described by Epstein and Escherich and later studied more closely by von Schick, Klingmüller and F. Hamburger.

After my publication on the cutaneous reaction as a test for the presence of tuberculosis, Wolff-Eisner and Calmette found similar local changes after the instillation of dilutions of tuberculin into the conjunctiva, and Moro and Lignières found them after the application of tuberculin by friction of the intact skin.

My cutaneous method has the advantage over the injection of tuberculin that it does not produce any general symptoms. It has the advantage over the cutaneous reaction of producing entirely harmless inflammatory efflorescences on the skin and over the percutaneous application of tuberculin that it can be carried out more quickly and more uniformly. It is, however, not as sensitive as the *Stichreaktion* and does not produce inflammatory phenomena of the tuberculous foci, which, after Koch's injection, can be utilized diagnostically.

My method of applying the test is as follows: The skin of the forearm is scrubbed with ether; then two drops of undiluted old tuberculin are dropped about four inches distant from each other. Then, with a vaccinating lancet, the point of which has the form of a small chisel, a superficial circular scarification is made between the two drops (for the control of the traumatic redness following the small scarification). Finally, the same scarification is made inside of the two drops; a few fibers of cotton are put on the drops so that they will not flow. After five minutes the cotton is taken off. No dressing is applied. The papula is examined after twenty-four and forty-eight hours. It is considered as positive when the tuberculin scarifications are clearly different from the control places, but the inflammatory reactive area must measure at least 1/6 of an inch (5 mm.).

RESULTS OF THE TEST

During the last year and a half I have made a cutaneous test on all the children who were admitted to the children's clinic of Professor Escherich in Vienna. Nearly half of these children were repeatedly examined and in many instances the results were controlled by subcutaneous injections of tuberculin made by Dr. Hamburger. Two hundred subjects were examined postmortem.

The results of these studies are shown in the two accompanying charts. Chart 1 includes all cases with the exception of those suffering from measles. The latter cases were omitted because during measles the cutaneous tuberculin test is always negative, as I have already pointed out in a former communication. This chart shows, therefore, the results of the tests in 1,407 cases. They are arranged according to age. For each year, from birth to the age of 14, one vertical division is made, and in each division is noted the percentage of reacting and non-reacting cases. The reacting cases are marked by shading. It is evident that in the first year the shading includes only 5 per cent. of the cases, rapidly increasing in the following years, and reaches a percentage of 80 in the tenth year. This high percentage can not be considered as being the figure for all children, as very many cases are admitted into the hospitals because of tuberculosis. In order to make the matter clear, I have marked in black those cases in which tuberculosis was manifest. You see that the black rises in the first year nearly as high as the shading. This shows that, in the first year of life, nearly all reacting patients present clinical symptoms of the disease. In the succeeding years we see that the shading denoting positive reactions far exceeds the black. This proves that not all infected patients present clinical symptoms; in other words, that latent tuberculosis becomes more frequent in succeeding years.

This increase of latent tuberculosis is more clearly shown in the second chart. All manifestly tuberculous cases are omitted. This includes all of those which are marked black on Chart 1, and, besides, all cases which were, in any way, suspected of tuberculosis; that is, all children with bronchitis or anemia. The children who

* Paper read by invitation before the Chicago Medical Society, Oct. 14, 1908.

† As noted in the department of Medical News in THE JOURNAL, Feb. 20, 1909, page 642, Dr. von Pirquet is moving to Baltimore.

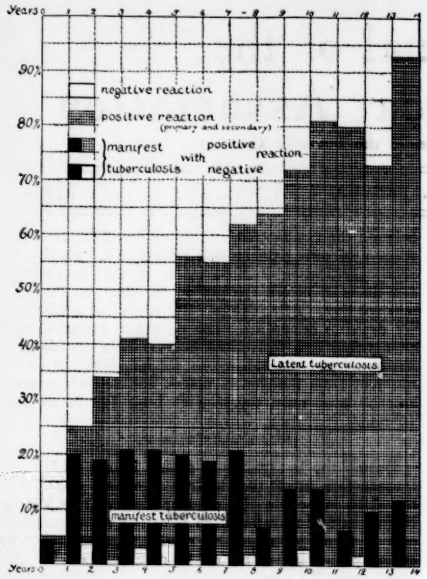


Chart 1.—Cutaneous tuberculin reaction in 1,407 children. Escherich Clinic, Vienna.

In this table the positive reactions are grouped as primary and secondary. In cases presenting clinical evidence of tuberculosis the reaction is positive in almost all cases after twenty-four hours, whereas in latent tuberculosis, especially in older children, we see that about half of the patients do react only after some days (this I have termed a "torpid reaction"), and some react only to a second test ("secondary reaction"). These two forms of reaction are indicated in the chart, and include also cases in which the cutaneous test was negative, but hypodermic injection of tuberculin proved positive. These three kinds of reaction have this in common: that a slight reactivity against tuberculin exists which is too weak to be evidenced immediately, but which is aroused after the first application.

SIGNIFICANCE OF THE REACTION

What does this form of reaction mean? One can say with some certainty that it generally means a slight and old tuberculous infection which is in the process of healing. Up to the present time I have not had a sufficient number of postmortem examinations to prove this point absolutely. But the following reasons speak for the validity of this view: first, at autopsies secondary or torpid reactions were found to have been produced by slight and old tubercles; second, fresh and clinically manifest tuberculosis does not show this form of reaction; third, the increase of these secondary reactions from year to year corresponds in its percentage to that established by Dr. Hamburger for the frequency of healed tubercles found at autopsy in children who died from other causes, and, fourth, we have a similar delay in the development of the local phenomena in re-

TABLE OF CHART 1.—CUTANEOUS TUBERCULIN REACTION IN 1,407 CHILDREN. ESCHERICH CLINIC, VIENNA

PART I

Years	0—1	1—2	2—3	3—4	4—5	5—6	6—7
No. of all cases	410	116	98	110	87	91	86
Reaction, positive	21 (5 %)	24 (4 %)	32 (33 %)	42 (38 %)	31 (36 %)	50 (55 %)	46 (53 %)
Manifestly tuberc. reacting	21	23	19	23	19	18	17
Manifestly tuberc. not reacting (miliary tuberc.)	1 (5 %)	4 (20 %)	1 (19 %)	3 (21 %)	4 (21 %)	1 (20 %)	2 (19 %)

PART II

Years	7—8	8—9	9—10	10—11	11—12	12—13	13—14
No. of all cases	59	94	63	57	55	49	32
Reaction, positive	35 (60 %)	60 (64 %)	43 (69 %)	46 (81 %)	43 (78 %)	36 (73 %)	30 (93 %)
Manifestly tuberc. reacting	12	7	9	8	3	6	4
Manifestly tuberc. not reacting (miliary tuberc.)	1 (21 %)	.. (7 %)	2 (14 %)	.. (14 %)	1 (6 %)	.. (10 %)	.. (12 %)

are dealt with in Chart 2 are chiefly those which came to the hospital for some acute infection and the healthy babies belonging to our so-called *Säuglingsschutzstelle* (the dispensary inaugurated by Professor Escherich to which healthy children are brought for observation and in which the mothers are taught how to care for them).

Chart 2 refers to the average occurrence of latent tuberculosis in the healthy children of Vienna. It is seen that, in the first two years, no shading appears. This shows that during that time an infection with tuberculosis practically does not occur without the existence of some clinical phenomena, such as bronchitis or anemia. On the other hand, the increase in the number of reacting children in the following years is nearly as high as in Chart 1 and reaches 70 per cent. in the tenth year.

vaccination with cowpox in cases in which a long time has elapsed after the previous vaccination.

I conceive that the reactivity against tuberculin appears some weeks after the infection has occurred and then increases in degree after some months to a considerable height. If the tuberculosis is overcome by the individual and is healed, the reactivity slowly decreases in the following years below the level of cutaneous activity. We know from the studies of various antibodies that, in an organism which has once formed antibodies and has lost them, a slight reinfection or a second injection with the same poison quickly stimulates a new and strong formation of antibodies. In a similar fashion, if a person with a latent or healed tuberculosis is again infected with tubercle bacilli or if he absorbs even a minimal amount of tuberculous poi-

son (by means, for instance, of a cutaneous tuberculin test) he again forms antibodies and shows, some days or a week later, a high reactivity. A high reactivity does not prove the existence of an active tuberculous process in the sense that the tuberculosis is progressive. It only proves that the organism has recently come in contact with tubercle bacilli or their poisons.

Therefore, from a consideration of Chart 2, we can conclude that in older children the presence of a tuberculin reactivity may be compatible with apparently perfect health. This coincides with the facts established by Naegeli, F. Hamburger and others, based on autopsies made in children of various ages.

The percentage of infected (reacting) children is a particularly high one in my table. In other cities it will hardly be as high because tuberculosis is notoriously prevalent in Vienna. Furthermore, all my patients belonged to the poorer classes. My statistics, therefore, lose in some degree their general value. Our children are infected at a much earlier age on account of the prevalence of tuberculosis among their parents. It is necessary to make similar studies in every city in order to ascertain the frequency of tuberculosis in general.

METHOD AND AIMS OF INTERNATIONAL STATISTICAL STUDY

I, therefore, wish to suggest a definite method for international use. The method is as follows:

All children are submitted to the cutaneous test. The following day they are inspected. Those showing a positive reaction are noted as belonging in the group of early reactions. A week later those who showed no reaction are again tested and inspected a day later. If they then react, they are grouped in the class of secondary reactions. Those who have not reacted on either occasion can be considered as belonging to the non-reacting class. This method of testing requires about one hour for a hundred children and only half an hour is consumed in the inspecting process. Medical school officers could easily accomplish this at the opening of the schools in autumn. One forenoon would be sufficient for a school of from 400 to 600 children. As the test is absolutely harmless, there can be no objection to carrying out such valuable investigations.

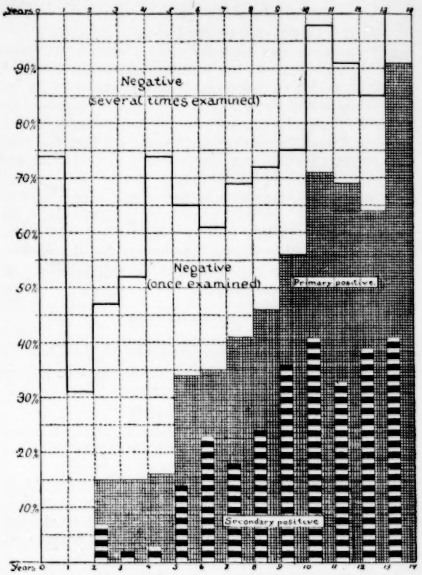


Chart 2.—Cutaneous tuberculin reaction in 1,134 children, clinically non-tuberculous. Escherich Clinic, Vienna.

TABLE OF CHART 2.—CUTANEOUS TUBERCULIN REACTION IN 1,134 CHILDREN CLINICALLY NON-TUBERCULOUS, ESCHERICH CLINIC, VIENNA.

PART I

Years	0—1	1—2	2—3	3—4	4—5	5—6	6—7
All cases minus all surely tuberc. and all suspect (pallor, bronchitis)	410—(21+1) =388	116—(23+ 4) =89	98—(19+4) =75	110—(23+10) =87	87—(19+6) =62	91—(18+7) =66	86—(17+8) =61
Frequently examined negative, also on autopsy tb.-free	84 (26 %)	61 (69 %)	40 (55 %)	37 (48 %)	16 (26 %)	23 (35 %)	24 (39 %)
Primary positive (both clinically unsuspected)	.....	.....	5 (7 %)	10 (12 %)	8 (13 %)	13 (20 %)	7 (12 %)
Torpid or secondary reaction	.....	.....	5 (7 %)	2 (2 %)	2 (3 %)	9 (14 %)	14 (23 %)

PART II

Years	7—8	8—9	9—10	10—11	11—12	12—13	11—14
All cases minus all surely tuberc. and all suspect (pallor, bronchitis)	59—(12+8) =39	94—(7+15) =72	63—(9+9) =45	57—(8+ 5) =44	55—(3+7) =45	49—(6+7) =36	32—(4+6) =22
Frequently examined negative, also on autopsy tb.-free	12 (31 %)	20 (28 %)	11 (24 %)	1 (2 %)	4 (9 %)	5 (14 %)	.....
Primary positive (both clinically unsuspected)	9 (23 %)	16 (22 %)	9 (20 %)	13 (30 %)	16 (36 %)	9 (25 %)	11 (50 %)
Torpid or secondary reaction	7 (18 %)	17 (24 %)	16 (36 %)	18 (41 %)	15 (33 %)	14 (39 %)	9 (41 %)

The classification given above is not a perfect one, inasmuch as the class of non-reacting children will contain some individuals who, at a further repetition of the test, would react and, therefore, would have to be transferred from the third to the second class. Three or more trials for three or more consecutive weeks can be easily performed in hospitals. One can also employ the more rapid method of Dr. Hamburger, which consists in injecting one milligram of tuberculin subcutaneously into the non-reacting children and examining them on the following day for a local subcutaneous reaction (so-called *Stichreaktion*). This method is, on

the whole, quicker and more exact, but is not as feasible for use on a large scale as, for example, in schools.

For practical and especially for statistical purposes the repeated cutaneous test may be considered sufficient.

The next idea in reference to my proposal of an international statistical study is to ascertain at what age children generally acquire the tuberculous affection. We should then be able to say at what age they are most susceptible. I hope that, by repeated annual tests and the determination at the same time of the clinical symptoms which arise between the last negative and the first positive reaction, we may be able to establish the onset of the disease. In this way we shall be in a position to institute the proper hygienic measures for the prevention of tuberculous infection in childhood, especially at the period of greatest danger.

THE DISEASES OF THE CEREBRAL ARTERIES

THEIR EFFECTS AND TREATMENT, WITH SPECIAL REFERENCE TO ARTERIOSCLEROSIS *

GEORGE A. MOLEEN, M.D.

Assistant in Neurology, Denver and Gross College of Medicine; Neurologist to Denver City and County and Mercy Hospitals

DENVER

To consider the manifestations of the conditions of the blood vessels of the brain, with reference to indications or suggestions for measures to prevent or at least postpone an attack of hemiplegia, is the purpose of this contribution.

Small or common things are sometimes overlooked in the eager pursuit of the large or more obscure ones, and this often results in the passing of a common disease while searching for the uncommon. The final perception of the aggregation of symptoms which, taken singly, are of trivial significance, not infrequently reminds us of our earlier sins of omission.

The fundamental cause of hemorrhage and thrombus seems to be undoubtedly an alteration in the vessel wall, a thickening of one or more of the coats of the arteries, or arteriosclerosis.

It has been stated long ago, in a way that has become proverbial, that there is no better indication of the age of an individual than the condition of his blood vessels. In the main this is true, but how much more certain is the indication when we are able to apply this statement to the cerebral vessels, as compared with vessels elsewhere!

Many opinions and arguments have been brought forward regarding the influences which have a bearing on the cause of arterial changes. A very important group is that referred to as toxic, and the most important in this group is syphilis. This influence is so thoroughly recognized that arterial occlusion occurring before the age of 40 is regarded with suspicion even in the presence of the most emphatic negative history.

When the vascular system is attacked by syphilis, two conditions may be considered, the untreated and the partly or insufficiently treated disease. In the former the vessel is suddenly attacked, and this as a rule with the evidences of endarteritis elsewhere. These conditions may come on during the secondary eruption. It is far more frequent to observe a patient in the thirties, who shows a transitory weakness of an arm, more or less sudden in onset, with numbness and tingling of the same side, or a unilateral oculomotor paralysis, who admits having had one or more of the manifestations of syphilis ten to twenty years before, and who has been to Hot Springs for four to eight weeks, had been rubbed with mercury and had taken "potash," after which he was pronounced cured. These are the partly or incompletely treated patients.

It seems inadvisable to enter into the various opinions as to whether high blood pressure is the cause of arteriosclerosis or *vice versa*; suffice it to say that they usually exist together. There are, however, two points bearing on the etiology which are deserving of mention:

1. With the thickening of the vessel wall the elasticity must be impaired, and, while normally the range between the systolic and the diastolic pressure is considerable, this lessening of elasticity would seem to shorten the range, with the result that the average pressure is increased through which a more continuous strain is exerted on the vessel wall.

2. It is also to be borne in mind that sclerotic arteries, or a predisposition toward them, are as much of an individual peculiarity, possibly through inheritance, as a big hand, a tough skin, or a large head.

PATHOLOGY

There are two forms of arteriosclerosis recognized, the diffuse and the nodular.

In most arteries, according to the observations of von Bergmann, the selective tendency of these varieties is opposed; the cerebral vessels, however, are about equally affected by both forms; these arteries were found to be affected by the diffuse form in 40 per cent. and in the nodular form in 43 per cent. Both forms, however, may coexist in the same vessel. This important observation seems to explain the apparent predilection on the part of the cerebral arteries. It also furnishes an explanation for the finding of the heavy beaded or nodular and the tortuous pipe-stem conditions to be felt in the radials in individuals who show no evidence of affection of the cerebral vessels. It may be said that the condition of the general arterial system is not always an index and, therefore, should not alone exclude the possibility of the existence of cerebral arterial sclerosis.

The two varieties of arterial thickening offer possibilities which are better considered separately. First, the nodular form, by reason of the irregularity of its distribution and the intervening portions of vessels with little change, suggests the likelihood of aneurism. These aneurisms occur either as multiple miliary aneurisms, affecting the smaller vessels, varying from 1/100 to 1/25 of an inch (Gowers), of which as many as a hundred have been found in a single brain, or they may affect the larger brain vessels. They are more frequent on the left side, vary from the size of a pea to that of an egg, and are genuine aneurisms involving all coats (Edwards). One point regarding aneurisms worthy of attention is that they may be more or less transitory; a sudden dilatation of a vessel supplied with abundant elastic tissue is quite possible, and it requires no great imagination to conceive the possibility of the sudden return to normal on the lessening of the tension. Again under this circumstance it may be very difficult to demonstrate such dilatations postmortem, however certain we may be of their occurrence during life. Rupture of either variety is a common result with the consequent hemorrhage.

* Read at the first annual meeting of Boulder County Society, Longmont, Colo., April 2, 1908.

The foregoing condition of the vessel wall is nearly always associated with plaquing, roughening of the intima and deposit of fibrin, and these conditions, associated with local slowing of the blood stream and weakening of the heart, favor the formation of the thrombi. It is important to bear in mind, however, that slowing of the blood current does not necessarily mean lowered blood pressure. It is the slowing of the current with the high tension combined that is most favorable to thrombus formation.

In the diffuse form, when uniform, the changes are for the most part nutritional, but may, as the thickening increases, affect one side more than another. Thrombus may occur, but partial or incomplete occlusion is more frequent and either end is softening which is proportionate to the degree.

SYMPTOMS

In no other condition is it so imperative to weigh with the greatest care the slightest evidence of disease, nor is there a condition in which it is more difficult to impress the patient with the seriousness of the seemingly trivial manifestations than in cerebral arteriosclerosis; in no other is the fact of this seriousness brought so forcibly to the attention when it is too late to remedy as in the case of rupture or occlusion of the vessel.

Of the general symptoms of cerebral arteriosclerosis, headache stands first. This is usually dull, not throbbing, and quite often described as a feeling as if a tight band were compressing the head; it occurs most frequently in the morning after walking about and diminishes as the day advances—except in syphilis, in which case it is usually severe and at night. Dizziness or vertigo is next in importance. Numbness, tingling, twitching, weakness in a limb, or in one-half of the body, disturbances in articulation are also common. Collins recently attempted to group, as a definite clinical variety, a number of cases of cerebral arteriosclerosis. The subjective symptoms were few and often elicited with difficulty: "Headache, dull and fugitive; giddiness, with a sense of insecurity of station and gait not attributable to the giddiness; occasional emotional symptoms; change in general appearance with a characteristic gait and attitude and altered physiognomy. There is frequently a lowered blood pressure in this class of cases, 110 to 130 mm. (S.)." This is probably the result of the secondary cardiac weakness.

When more localized the symptoms may be divided into those just previous to a "stroke" and those during an attack; the former may be most readily described in the reports of cases which follow.

DIAGNOSIS

This usually presents little difficulty, particularly in advanced cases, if carefully studied, and especially if localizing symptoms be present. Obviously, it is important that the condition be recognized early, and it is here that the little things should be carefully weighed collectively. Increased blood pressure, increase in the force and lengthening of the first heart sound, accentuated second heart sound and an increase in the tidal wave of sloping ascent and delayed decline should lead to the suspicion of arteriosclerosis.

It is to be borne in mind that the high tension may be the result of other existing conditions, such as brain tumor, pulmonary disease, toxemia, overwork, etc., and in nervous strain it may be prolonged without sclerosis. If the tension is treated we may not be called on to treat the sclerosis. In the words of Thoma, "by avoiding the causes of increasing the blood pressure, by proper hygiene and regimen, serious and fatal vascular disease might be anticipated; if it became possible to recognize arteriosclerosis sufficiently early it would be easy to limit the danger of rupture of blood vessels and aneurismal formation." Again, it must be remembered that the condition of the general arterial system is not an index to the condition of the cerebral arteries and should not be given too much weight in excluding cerebral arteriosclerosis. The age and habit of the patient, the character of the headache and the time of its occurrence; vertigo, numbness and tingling, repeatedly occuring in the same locality; sclerosis of the retinal vessels as revealed by the ophthalmoscope; slight weakness of one side of the body with a tendency to favor the same side, should lead one to suspect the condition. The suspicion is strengthened by syncopal attacks, localized twitching or epileptiform seizures, transitory attacks of paresis, with aphasia or dysarthria, psychic symptoms and finally the occurrence of the so-called "stroke."

The ophthalmoscope is of the greatest service here; with it optic neuritis or atrophy may often be recognized at once, either of which speaks strongly against vascular disease. It is rare, if ever, that the optic nerve presents either change as a result of a purely vascular lesion. By it is revealed the condition of the central artery, which is one of the most important guides as to the state of the cerebral vessels.

A reflex lately described by Gordon shows promise of being of value in determining whether, in an attack, a vessel is occluded or not. It has been named the paradoxic reflex and is elicited by firm digital compression of the calf muscles at about the insertion of the gastrocnemii while the foot is resting and relaxed. If the pyramidal tracts are irritated there is extension of the toes with some separation, and if not, they are flexed or almost immobile. The reflex is present before the Babinski phenomenon. When complete occlusion occurs this reflex is lost and the Babinski becomes marked. In a case of thrombus (probably specific) observed recently, in which there was weakness of one side of the face and tongue, and slight weakness of the arm, this reflex was present and the Babinski absent on the same side. Contrary to orders, the patient was allowed to be up and about until complete hemiplegia supervened; the Babinski sign became marked and the paradoxic disappeared.

It would seem that transitory attacks of paresis of short duration are best explained by acute dilatations of the vessels rather than by occlusion or vasomotor spasm, particularly, if they subside on reduction of the blood pressure. This is also true of localized twitching. The fact that in many of these cases there is immediately following such an attack an increased strength, as shown by dynamometer record, on the side affected, is also noteworthy.

Stupor and coma are not infrequently associated with cerebral arteriosclerosis and may suggest uremia or other forms of toxemia.

From the fact that coma may be artificially induced by compression of the carotids it seems probable that interference with the cerebral circulation as a result of sclerosis, together with low tension, may alone induce such a state. A low blood pressure combined with a slow rate of pulse during coma should speak rather for sclerosis than uremia.

The prognosis before the attack is dependent on the degree and variety of the sclerosis and the obedience of the patient. In the main it is fairly good in either variety of arteriosclerosis if not so far advanced as to greatly impair the nutrition. Recurrences, however, are to be expected sooner or later, though, as had been stated, they may be postponed a considerable length of time. After the attack the chances of clearing an obstructed vessel are doubtful, and if a complete hemiplegia has occurred the use of the affected side will be proportionate to the ability of the opposite side of the brain to take up the function, together with the preventing of contractures. Hemorrhage is more often fatal and less promising.

TREATMENT

The all important factor is rest and quiet as soon as symptoms of a definite character are established. The diet should be carefully guarded. A constant peculiarity to be noted in most cases is the abnormal appetite; the patients veritably eat until they can not walk, and to keep the consumption of food down will be no little task, since they do not seem to appreciate the amount they are eating. While the patients are at rest the diet should be light, easily digestible and limited in quantity.

Iodin, notwithstanding opinions to the contrary, in view of its action in increasing katabolism and its tendency to attack those tissues most recently formed, is obviously of value here. It should be borne in mind, however, that since increased blood pressure has been the cause, this must first be met if the most pronounced effect of the medicament is to be obtained. The results with potassium iodid are much more prompt and marked if absolute rest is maintained than if not. Iodids are too often regarded as antisyphilitics and the administration of them is assumed to be indicated by reason of syphilitic disease. This is, however, not the case. Iodin is not antagonistic to the virus of the disease: it is, or should be, used only to remove the results of the disease —hyperplasia, granulomata, etc.—and is indicated when the same conditions exist as a result of other infections as well as those of syphilis.

Then the plan which I employ is as follows:

1. Absolute rest in bed.

2. Saline catharsis (preceded by calomel if necessary); magnesium sulphate or sodium phosphate may be employed. This is an effective means of keeping the tension moderate or low.

3. Potassium iodid, beginning with 10 minims and increasing a drop each day of the saturated solution until 50, 60 or 70 drops, three times daily, are reached. Should iodism be manifested, the iodid may be stopped for twenty-four hours and resumed where it was left off. After the maximum is reached it should be diminished until 30 or 20 drops are taken and then discontinued. A tonic may then be instituted, such as strychnin, beginning with 1/30 grain and later increasing to 1/24 or 1/20 grain. It is best given in the compound syrup of phosphates of the National Formulary, which is a rich phosphatic reconstructant.

If the hemoglobin is low, iron and arsenic may be alternated with the above.

If syphilis is a probability, the virus should be combated with mercury alone, as soon as possible, and followed by iodids and later with tonic chalybeates.

The so-called serums, such as Poehl's and that of Trunecceck, antisclerosin and the like, which contain, in the main, sodium chlorid, sodium sulphate, sodium phosphate, sodium carbonate, magnesium phosphate and glycero-phosphate of calcium, are advocated, and some good results are claimed for them. They are best given after the more acute symptoms have subsided, such as twitching, localized weakness, numbness and tingling.

When sudden weakness, uncontrollable twitching or spasm come on suddenly and progress rapidly, nitroglycerin or sodium nitrite may be used with advantage until, by saline catharsis, the hypertension may be reduced. Thyroid extract has also been highly recommended for the control of the high tension.

Another remedy is deserving of more attention than it has received, namely, thiosinamin. This substance was first introduced by von Hebra in 1892, who found it of value in the treatment of lupus and old cicatrices. That it possesses the power of softening cicatricial tissue such as strictures, corneal opacities and adhesions at the base of chronic deafness has been frequently observed. I have used it with apparent good results. In one case of cerebellar gumma it was given following a very heavy course of iodid in view of the evidences of cyst, the capsule of the tumor having apparently resisted the iodid; the postmortem revealed a secondary hydrocephalus from obstruction to the foramen of Magendie, and a slight cavity at the point expected, communicating with the fourth ventricle, but no capsule.

It is given in substance or with milk sugar in increasing doses of from 1½ to 2 grains.

In conclusion it may be stated that in the majority of these cases much may be done, but it is the physician who is best enabled to appreciate the danger avoided, for, as has been mentioned, few patients, and even those standing blindfolded, as it were, on the brink of a precipice, can be made to understand the seriousness of the probabilities until it is too late. The alternative may be truthfully and forcefully regarded as one between six or eight weeks in bed, on the one hand, and death, life in a wheel chair, or at least a permanent defectiveness, on the other.

REPORT OF CASES

CASE 1.—*Patient.*—A man aged 52, whose family history was negative and whose early history was irrelevant, except that he had been a moderate drinker and had for some years suffered from asthma of emphysematous origin, with the usual chronic bronchitis. Specific disease was denied. He had had a gastric hemorrhage two years before; urine was normal.

History.—Within the year previous he had experienced an attack during which he was unable to articulate. This lasted about an hour. Following this he was well for some months, then another attack occurred in which he would misplace words in attempting to speak; he was aware of what he desired to say though he could not place his words properly. This attack was of about two hours' duration. Both were accompanied by dizziness and headaches were frequent, and attributed to other causes (indigestion, etc.). He was becoming sallow and ashen about the face. On Sept. 24, 1906, after a hearty meal, preceded by an appetizer, he occupied himself about the kitchen of his house, which was quite warm; he suddenly felt himself falling forward and to the right side, and in attempting to stand the same tendency to face to the right persisted, and he could not keep from going to the right side and striking the wall. During this or before there was no headache nor vertigo. Aphasia was absent. The pulse volume was markedly increased and the strength of the right side diminished. The anterior temporal arteries were quite prominent. After twelve hours' rest in bed and the use of circulatory depressants the strength of the affected side became increased above that of the unaffected side. The patient gained so rapidly that he could be kept at rest only for a few days. About six or seven months later he began one afternoon to experience twitching of the abdominal muscles of the right

side. This subsided after the second 1/100 grain of nitroglycerin. Later he ate a very hearty dinner, preceded by liquor, and an hour later the twitching recurred rapidly, extended to the arm, and then a general convulsion followed with complete unconsciousness and biting of the tongue.

Examination, Treatment and Diagnosis.—When seen the patient was lying in bed, somewhat dazed and with some weakness of the right side. The pulse volume was very high, though slow in rate. The temporal arteries were seen to be very prominent and tortuous. The deep reflexes were increased about equally; superficials increased but no Babinski phenomenon. The patient was put to bed and at absolute rest for four weeks. Potassium iodid was given in increasing doses up to 50 drops, three times daily, and then reduced to 30, when tonic treatment including compound syrup of the phosphates was instituted. A complete change, objective and subjective, was the result, which persisted up to the time of the attack described below; there were no vertiginous attacks and no headache. The radials showed only moderate sclerosis while the retinal vessels were quite thickened and tortuous. There were no sensory symptoms. A nodular form of arteriosclerosis affecting the inferior external frontal and the ascending parietal branches of the middle cerebral with recurrent aneurism or sudden dilatation seems to coincide best with the clinical manifestations of this case. This diagnosis is supported by the suddenness of the onset as well as the rapid abatement of the symptoms following the lowering of blood pressure. The order of occurrence from below is interesting, as evidenced by the areas involved, namely, motor speech, coordinate speech, motor in extremities and abdominal followed by right-sided convulsion becoming general.

Course of Disease.—On arising and attempting to walk, Sept. 4, 1908, the patient found that his left foot dragged and his hand very weak, as a result of which he dropped several articles. He did not seek medical aid but persisted in going about aided by a cane. There was a decided clouding of the consciousness during the day. About noon he sought a Turkish bath, where he fell and was carried out shortly after entering and taken to his office, where he remained in a dazed state until late in the afternoon. He made his way to the telephone with great difficulty, summoned assistance and was taken to his home. On observation, the same evening, he was stuporous and inclined to be quite emotional. The left side of the body was almost motionless, cooler than the right, and, in short, presenting all the evidence of a left hemiplegia of thrombotic origin, including a positive Babinski phenomenon on the left side. He was removed to the hospital and placed in bed. On the day following the lower left half of the face, left arm and leg were involved and the motion was limited to slight movement of the arm from the shoulder. The treatment was substantially the same as in the previous attack. After about ten days the improvement was progressive. Twenty-four days after admission the plantar reflex became flexor in type. The finer movements of the fingers were gradually resumed and the patient returned to his business Oct. 12, 1908, thirty-eight days after the onset. This attack emphasizes the condition of the cerebral vessels and would seem to evidence the effect of the treatment, as regards the vessels of the left side of the brain, which were in the previous attacks the seat of disturbance.

CASE 2.—*History.*—A bank teller of 28, who had previously enjoyed good health, and denied specific infection and alcoholics, on arising one morning, noticed that his left arm "felt funny"—felt warmer than the right, and fell to the side, jerking uncontrollably. This rapidly passed away and he went to work as usual feeling well but for pain over the right eye, which he had experienced before. Later he had an attack accompanied by headache in which the right fields of vision were blind. He stated that in looking at an amount intently he was able to see only the figures to the left of the decimal point. It was recalled that recently when he supposed he had placed bills in a certain compartment he would later find them on the floor; in other words, he was unable to trust his left hand without watching it. The attacks were of short duration. A few days later, on awakening, he became dizzy and would have fallen had he not caught himself with the right hand; his left was useless; there was headache over the left eye, the left side of the face was drawn and the tongue was protruded slightly to the right side. There was some numbness but not in the face or tongue. With the disappearance of the numbness, in about three and a half hours, he suddenly became possessed of the power of his arm and face.

Examination.—At this time the thermometer showed a constant lowered temperature of the left side. Dynamometer: Right, 335; left, 290. (The patient was right-handed.) The eyes showed no change other than a slight internal rotation of the left eye. Fields were normal. The retinal vessels were not tortuous though somewhat sclerotic and at places a whitish exudate was evident.

Diagnosis and Treatment.—In this case it was thought that a condition obtained in the posterior cerebral and pontile vessels somewhat similar to that which was believed to exist in the former case. Rest in bed with iodids, followed by tonic, was the treatment and there has been no recurrence since August, 1907.

CASE 3.—*History.*—A man showing his age and hard work with a negative family and previous history was well until three months before the time of the first observation, when he fell on account of sudden weakness of his right side, though for three years he had been getting progressively weaker. On September 22, he fell and was unconscious for about fifteen minutes.

Examination.—The patient showed weakness of the right side. Dynamometer: Right, 100; left, 100. (The patient was right-handed.) Both radials were markedly atheromatous. The patient's memory was impaired for recent events. In speaking a drawl was evident. There was evident weakness of the right side of the body and the nasolabial fold was more marked on the left side. There was no change in the eyes except a considerable sclerosis of the retinal vessels.

Treatment and Course of Disease.—Treatment, beginning Oct. 24, 1906, was the same as the preceding. The notations on the chart show that with the increasing iodids the mental condition at first declined, urine passed involuntarily, restlessness increased and at times the right side seemed quite powerless. On November 2 there was twitching of the left side; November 7, involuntary defecation. On November 22 the iodids were discontinued; November 26, the patient was quieter, slept and ate much better; micturition and defecation were under control. On December 16 the iodids were resumed. Two days later there was stupor with stertorous breathing and dysphagia; consciousness was regained in about thirty hours; respiration became normal and dysphagia disappeared. On December 26 the patient walked without help, but his gait was very unsteady. On December 31 potassium iodid was discontinued at 30 drops and general diet ordered with tonic. On January 26 the patient was up and dressed; walked with the aid of a cane. On February 14 the iodids were resumed. Improvement was more rapid. On March 21 the iodid was discontinued at 46 drops and tonic resumed. On April 16 the patient was quite clear; walked unassisted and was dismissed from hospital. There has been no recurrence since, but mental enfeeblement is slowly progressing.

The diagnosis of cerebral arteriosclerosis with partial thrombus of the left side seemed to be justified.

The following case is reported not only to show the necessity of recognizing the early manifestations but the importance of insisting on rest as a part of the treatment, and also, since it seemed to show the action of iodin, in that it leaves the vessel affected in better condition than others.

CASE 4.—*History.*—The patient was a woman of 69 with a negative family and previous history and the mother of nine children. Nine years before the present attack she became dizzy and fell forward and to the right while on the street, striking the right side of the face. For four years she had complained of headache and dizziness, during which she had attacks in which she would pitch forward, usually to the right side.

Examination.—The patient complained of twitching of the right side with considerable tingling and annoying prickling

of the tongue on the same side. In walking she favored the right side. There was a coarse tremor on the same side. Dynamometer: Right, 100; left, 100. (The patient was right-handed.) After rest and treatment the strength became in seven days, right 154, left 140, and no recurrence until eight months later, when, about 11 a. m., the patient began to complain of numbness of the left hand and foot accompanied by irregular twitching. Pulse was high in tension and 60 per minute in rate.

Course of Disease.—Contrary to advice, the patient persisted in going about, and at 4 p. m. she began to weaken on the left side and slowly fell to the floor after an attempt to work. She was again cautioned to remain quiet. Orders were disobeyed and at 6 p. m. the same side began to weaken gradually, continuing to grow weaker until 2 a. m., when the entire left side was completely paralyzed. There had been no loss of consciousness and but slight dizziness. The course from this time was that of a completely occluding thrombus on the right side, and at present—two and a half years later—the patient is barely able to stand and has but a limited use of the hand.

CASE 5.—This is one which was of the diffuse type and quite advanced in the cerebral vessels, especially those anteriorly located and at the base.

History.—The patient was a man aged 56, born in Maine, with a negative family history other than the fact that his mother died of tuberculosis. He had never used liquors and denied venereal disease emphatically. About December, 1906, he noticed a feeling of tightness in his head, as though "the top was coming off," which first occurred only on stooping. This was greatly relieved by taking a saline cathartic. There was no dizziness or numbness. About January, 1907, he became unsteady on his feet with a tendency to go to the left. About this time his tongue became thick and he had difficulty in speaking which was more marked after excitement. There was also some difficulty in writing. Shortly afterward he began to have headaches, more often in the occiput, aggravated by clerical work, and accompanied by nausea but no vomiting. There was no localized weakness nor numbness.

Examination.—The patient was a man of good color and well developed. The radial arteries showed only a moderate sclerosis and no nodules. Memory and attention were good. In writing the patient soon became unable to form letters, though he knew the proper rotation; and this inability was not associated with any peculiar sensation in the hands or arms. Dynamometer: Right, 250; left, 230. (The patient was right-handed). In walking with the eyes open he staggered to either side slightly, while when the eyes were closed the staggering was marked, though neither side was favored. There was no ataxia in the arms. The knee-jerks were increased and more so on the right side. Forearm reflexes were slightly increased. The plantar reflexes were very active, the right somewhat extensor in type. Tactile, pain, temperature, localization and postural senses were present and equal, though pain and temperature were somewhat delayed and uncertain. Stereognostic sense was present. External ocular motion was normal; the pupils were about 3.5 mm., equal and responded to light, accommodation and in convergence. Vision, O. D., 20/30; O. S., 20/30. The fields of vision were apparently normal. The fundi showed no changes except in the vessels, which were very sclerotic, the blood stream calling to mind a thermometer capillary tube. Hearing: Right, 14/24; left, 20/24. Taste of salt or sugar was not perceived on either side.

Course of Disease.—Soon after treatment the patient began to fail mentally in that he became indifferent, first to his business affairs, and later to everything. Urine and feces passed in bed with unconcern. His memory gradually failed. The weakness increased equally and with it a desire to sleep. When aroused he would reply to questions in a mumbling manner. There was no difficulty in swallowing at any time. The taking of iodids seemed to hasten the decline at each attempt at resumption. All treatment was ineffective and the patient gradually became weaker until his death, in October, 1907. Unfortunately no autopsy could be had.

Diagnosis.—There was here undoubtedly a condition of diffuse arteriosclerosis, as a result of which nutritional changes were advanced to a degree at which softening was encouraged by alteratives before the sclerosis was attacked.

316 Mack Block.

THE ABUSE OF SURGERY *

J. L. WIGGINS, M.D.
EAST ST. LOUIS, ILL.

The prevailing custom of requiring an annual address from the president of the association presents a delightful opportunity to scold without being scolded in return. I shall use the privilege to consider some of the abuses of surgery by amateur surgeons; by which I do not mean life-saving procedures at which it is impossible to secure an experienced operator, but operations of choice.

By the time the medical student graduates he is imbued with the idea that surgery is the only department of medicine worth considering; after serving a period as hospital interne he is still more firmly convinced of the truth of the idea. Everything that pertains to general practice finds him listless and uninterested; only an opportunity to shed blood wakes him up. The young practitioner's newly-furnished offices contain a profusion of surgical instruments and works on surgery; his single work on general practice is scarcely touched. After he has forgotten much that is indispensable for intelligent operative work, he perhaps attends a postgraduate school and is turned out, a finished surgeon, after a six weeks' course of instruction, during which he has been occupied mainly in watching an expert operator work at a distance.

A diploma from an accredited medical school to-day means much more than a similar diploma did twenty years ago. Higher preliminary requirements, a longer course of study, more thorough instruction, better clinical facilities and more capable teachers—all warrant the expectation of a higher degree of efficiency in the modern graduate. Yet such graduates have often disappointed reasonable expectations most woefully, while men with inferior advantages have far exceeded all anticipations.

The amateur in surgery sometimes excuses himself by the example of those who, beginning with apparently less equipment, have reached a position of assured proficiency. He says that he must begin some time to learn by experience as they did. This excuse would be valid if surgery were to-day what it was twenty years ago. Large clinics and postgraduate schools scarcely existed then. The operators and surgeons of twenty years ago did the best they could in the circumstances; they did much good and some harm. Attempts which were permissible or commendable then would be criminal to-day.

It takes more than the ability to cut and sew to make a surgeon. There is a wide distinction between the words "operator" and "surgeon," and a recent graduate, except in rare instances, is not competent even to operate. Skill, confidence and judgment in any vocation come from constant practice. No medical man would select an occasional operator to perform an important operation on himself or a member of his family. Their knowledge protects physicians; is not the public

* President's address before the Ohio Valley Medical Association, French Lick, Ind., Nov. 11, 1908.

entitled to equal protection? Yet the law at present permits a licensed physician to rummage around in the abdomen at will, even though his previous surgical experiences may have been limited to the opening of an abscess. It is true that conditions are gradually readjusting themselves; but there ought to be some common basis of understanding as to the minimum qualification to be expected of one who elects to practice a specialty.

In Germany the Prussian minister of public instruction, through the Scientific Commission for Medical Affairs, has addressed to the medical councils the suggestion,[1] on which they are expected to take authoritative action, that the right to use the title of specialist be restricted to those who have had a requisite amount of postgraduate training — three years, as a rule — obtained at officially recognized and approved institutes or under approved specialists. In Austria[2] a similar ruling has been submitted to the profession by the ministry of education, with the additional provision that no one is to be recognized as a specialist in more than one branch.

It would be scarcely practicable to adopt these rules in this country at the present time. Nor is it advisable that surgeons should be turned out by the gross, machine-made. A period of general practice will develop better surgical judgment and a higher sense of responsibility in a man than will the devitalizing moral atmosphere too frequently found in our large hospitals. Some such requirements as the following should, however, be enforced:

A man who decides to specialize in surgery should file notice of his intention with the state board, and should be furnished by it with a list of accredited postgraduate schools. His course of special postgraduate study should be not less than one year long, and should give him a firm practical, as well as theoretical, basis for work. No one should be permitted to call himself a surgeon or to practice surgery unless specially licensed.

One of the advantages which would accrue from placing these restrictions on the practice of surgery would be the limitation of the supply of surgeons, for no matter how perfect the training, unless there be reasonable opportunity for practice, the hand soon loses its cunning and the judgment errs. It is reasonable to suppose that a creditable equipment of skill and judgment could be maintained by a surgeon drawing from a population of from 50,000 to 60,000.

Suppose that these requirements are in the main sufficient, and that they are enforced by law; have the profession and the public any right to make further demands? They have. Many details contribute to make the results of surgical operations vicious, passable or perfect, judged by our present standards. No one man, no matter how well equipped nor how resourceful he may be, can give proper attention to every detail of an operation. In order that his work may approach perfection, he owes it to himself, to the patient, and to the consulting physician to provide a trained assistant and an experienced anesthetizer. These should be as much a part of his armamentarium as his instruments and his knowledge. They should share his responsibilities in their individual departments. Nothing too severe can be said in condemnation of the vicious custom, almost a rule, of the operator drafting his assistants from those present. The surgeon is consulted presumably on account of his attainments, his experience and, let it be hoped, his honesty. It is a compliment which no man can ignore; under these conditions one who does not give the best of all he has is unworthy. He owes it to himself, to his consultant and, most of all, to his defenseless patient, that every avenue of possible danger be safeguarded. The assistant who is unacquainted with the surgeon's individual methods not only does not assist, but in many instances interferes with the operator, often inadvertently courting complications by some simple error of omission or commission. When the question is one of health or illness, life or death, sentiment should not outweigh duty. The surgeon's object, once understood, will be appreciated, and no earnest physician will withhold cooperation in attaining the best results for his patient. It may be urged in objection that trained assistants are rare outside of large hospitals or exceptional conditions, and that one doing a restricted amount of work is unable to maintain such assistance; yet I have personal knowledge of at least a score of men in smaller cities who have perfected an organization composed of a few men who, while engaged in general practice, have found it possible to attain a high degree of proficiency as assistants. These men have found this association indispensable. The degree of efficiency may not be as high as that maintained in the larger clinics, but it is worthy of commendation.

One of the most valuable assets in any community is the educated, capable and honest family physician. His position is assured. He should not, and he will not, be displaced by the specialist, no matter how gifted. The welfare of his community is in his keeping. It is his family. Try as he may, he can not escape the moral obligations that rest on him. He is the first consulted; and when he deems a disease amenable only to surgical procedure his opinion is sought in regard to the surgeon who may be safely trusted. At times he may err, but there is small danger when he is actuated by honest impulses.

I reiterate that my purpose is not to discourage honest effort, if the means employed in preliminary preparation are in keeping with the responsibilities of the work. I only desire to call attention to existing evils, and to arouse public opinion to condemn or, if need be, to restrain this wild scramble of incompetent aspirants for perquisites and honors unearned and unmerited.

11½ North Main Street.

1. Berlin Letter, THE JOURNAL A. M. A., Sept. 19, 1908, li, 1024.
2. Vienna Letter, THE JOURNAL A. M. A., Oct. 3, 1908, li, 1167.

ADVANTAGES AND DIFFICULTIES OF PUBLICITY IN CONNECTION WITH MUNICIPAL PUBLIC HEALTH WORK*

ERNEST C. LEVY, M. D.
Chief Health Officer
RICHMOND, VA.

Education of the public is one of the most fundamental necessities in all public health work. Our efforts to reach the public are of two kinds: first, to educate them directly on matters of sanitation and personal hygiene, whereby they may be taught to do their share of the general work for the improvement of the public health, and, second, to acquaint them with the immediate work of their own local department of health.

* Read before the Section of Municipal Health Officers at the thirty-sixth annual meeting of the American Public Health Association, Winnipeg, Manitoba, Aug. 25-28, 1908.

The first kind of publicity has been fully discussed both in the annual address of the President of the American Medical Association[1] and in the report of the Board of Public Instruction of the same Association.[2]

I shall, therefore, confine myself to the second phase of the subject.

In our efforts to apply the teachings of sanitary science in our own community, we are constantly hampered by the passive opposition of ignorance and indifference and the active opposition of obstinacy and selfish interests of certain classes, all of which can be combated best by keeping the public informed on the policies of the health department. Again, opposition arises from the feeling that our knowledge of preventive medicine is imperfect. None can be more painfully aware than are we health officers ourselves of that fact, yet there is no community in this country in which the health department is allowed to give to the public the full practical benefit of firmly established sanitary principles. When practice has caught up with the teachings of sanitary science, then it will be time enough to base arguments on the imperfections of that science itself. Since this attitude of opposition is assumed chiefly by the ignorant, publicity is here, too, the logical remedy.

Let us take the subject of tuberculosis as an example. The public must be shown what the mortality from tuberculosis is right at home, what it costs their own city each year, what local conditions have a special bearing on the problem (and it must be made very plain that in their own community there exist the same opportunities for successful work that are found in those places in which the campaign is already far advanced), and how their own local department of health purposes dealing with the problem.

If the community is one in which nothing has previously been done, articles should be published in the daily papers showing why registration of cases is regarded as the first step, explaining just what is meant by registration, and endeavoring to remove the prejudice which naturally exists against this measure. Naturally, at the same time, the doctors of the city should be reached by special means and the matter discussed from their standpoint, through circular letters and by announcements before the local medical society, but this does not belong to the aspect of the subject which is under discussion.

Next, articles should be published in connection with the passage of an antispitting law and later with its enforcement. In the same way, publicity will aid in having free bacteriologic examination of sputum; the public should know what this is for, what it can and what it can not accomplish. They should appreciate the necessity of such work as this being paid for by the city itself.

Later on, the health department will probably start its dispensaries for consumption. Several articles will then be needed, to explain, first of all, the necessity of furnishing free advice and treatment for those who are unable to pay for it, who would, therefore, inevitably go from bad to worse and finally die, and who would, meanwhile, be a constant menace to the community. It should also be explained why the dispensary is the logical precursor of the sanatorium and the hospital for tuberculosis. Then, after the dispensaries are established, articles will be needed from time to time giving accounts of their workings, telling of the number of patients treated and selecting a few cases to bring out the fact that cure (or arrest of the disease) is being secured in many instances, describing conditions found in the homes by the visiting nurses, and showing that such places are menaces to the community unless they are under control.

The more completely the public has the workings of the health department placed before them at each stage of progress, the more active the people will be in lending their cordial support to every move and the less damage can be done by those individuals (present in every community) who oppose every step in advance. The health officer should, therefore, endeavor to keep the public informed as to what is being done. But this is not always easy. If it were possible for the health officer himself to write the articles (including the headlines) exactly as he wished them to appear, and if the newspapers would then publish them in just that form, neither adding to them nor cutting, the chief difficulties of the problem would be solved. But it is obviously impossible for the health officer always to find time for this and, besides, many excellent health officers would make a failure of just this kind of work, skill in popular writing not being one of the prime accomplishments demanded of our profession.

The health officer, being thus forced to rely almost entirely on the newspaper staff for putting these articles into shape, encounters two classes of difficulties. The first arises from the impossibility of getting the papers to follow up any of the work of the health department in a systematic manner, and the second is due to the unfortunate tendency to sensationalism shown by all our newspapers.

There is scarcely a paper in the country which can manage to present to its readers a logical series of articles extending over a considerable period of time and dealing, for example, with such a subject as the local tuberculosis campaign. To the ordinary reporter, each day's facts are good only for a special "story," rather than for merely one chapter of the whole consecutive account of plans and work. This difficulty is almost insurmountable. It would not be so hopeless if one reporter on each paper were regularly assigned to the work, but it often happens that, after the health officer has spent many hours in getting some obliging reporter to understand somewhat fully the plans of the health department, an entirely new reporter shows up some day as his successor on the city hall assignment and treats the facts given him as if they were some entirely new matter (as, indeed, they are to him) with which the department is dealing for the first time.

Naturally editors endeavor to give the public exactly what they want. Most persons, reading their papers hastily and imperfectly, would not carry in their minds, from day to day and from week to week, the thread of what had gone before. Until the public itself has become even more actively aroused to the possibilities of preventive medicine as a subject in which each one should himself be vitally interested, and until, in consequence, information along these lines is as eagerly sought as is the daily instalment in a long-drawn-out murder trial, it would seem that the difficulty under immediate discussion must remain unsolved.

The tendency to sensationalism on the part of our daily papers stands always in the way of such publicity

1. Burrell, Herbert L.: A New Duty of the Medical Profession; the Education of the Public in Scientific Medicine, THE JOURNAL A. M. A., June 6, 1908, l, 1873.

2. THE JOURNAL A. M. A., May 23, 1908, l, 1742.

as the health officer desires. Every reporter is on the lookout for good "stories," and, therefore, those points which the health officer wishes especially to emphasize are fairly certain of receiving less attention than other phases of the subject. This often results in articles which are either utterly misleading or which dismiss in a few words the features which are essential from a public health point of view and give undue prominence to some side fact or incident, and this, through liberal embellishment by the reporter, is made to furnish not only the main part of the article, but also the wonderful headlines under which it appears.

One of the most striking and annoying incidents of this kind in my own experience occurred in the winter of 1907. Late one afternoon I was called up by telephone from the office of the president of the Richmond, Fredericksburg & Potomac Railroad, and told that there were two negro smallpox suspects on the south-bound train, due in Richmond at 7:15. They had boarded the train at Baltimore, but the conductor had not had his suspicions aroused until after leaving Washington.

I was informed that the president of the railroad desired to do whatever the health department of this city required. I at once replied that the train must be held at Acca, a station three miles outside of Richmond, until I got there. Although the train was the through Florida express, crowded as it always is in midwinter, the president at once agreed. It was less than an hour and a half before the time that the train was due in Richmond, which meant a little over an hour before it was due at Acca. After much difficulty I succeeded in finding our diagnostician, and set out for the four-mile drive from the center of the city.

At Acca we found the train standing on the track, where it had been for ten or fifteen minutes. The suspects were locked in a coach to themselves. They showed excellent recent vaccination scars and were found to have nothing more serious than measles. The train was allowed to proceed, with the trainmen under instructions to keep the coach locked until the men were put off at their destination, a few miles south of Richmond, and to bring it back to Richmond next morning for fumigation—not so much because this was thought to be necessary as to allay any criticism against the railroad.

Two days afterward I incidentally told a reporter on one of our afternoon papers of this occurrence for the purpose of illustrating the excellent manner in which every one was trying to cooperate with our newly organized health department, and expressed special satisfaction with the action of the railroad president.

But when the paper came out, there on the first page, extending across a double column, were the glaring headlines: "Health Chief Levy Holds Up a Train. Smallpox Suspects Bound for Richmond Detained at Acca. Doctors Win Wild Race Against Time in the Night!" Under this appeared a most thrilling account of how the health department had learned of the suspected cases; how, with only an hour to spare, the health officer had summoned the diagnostician and jumped into the buggy. "With a cold north wind chilling them to the marrow, the two physicians, plying the whip frequently and vigorously to the spirited steed that drew the light buggy, made their wild race against time, over snow and ice-covered roads cloaked in Stygian darkness," and arrived just as the headlight of the engine appeared. (Of course, it would never have done, from a dramatic standpoint, to have had the train standing when they arrived!) As the train slowed down, the health officer had flashed his badge and called on the engineer and conductor to halt. After much protest they did so. Even reportorial ingenuity could make nothing of the dénouement, and the story ended with the anticlimax of the verdict of measles.

Naturally, the railroad president, having the interests of his road deeply at heart, was much annoyed by this account. He complained bitterly of the injury done himself and his road, stating—which was perfectly true—that the department would have known nothing of the matter if he had not himself informed us. The whole matter was finally adjusted by a communication setting forth the facts and disclaiming responsibility for the reporter's account. To this day, however, this incident might affect the readiness with which we would be given information in similar cases.

In order to have correct accounts appear in the daily papers, there is but one course, and that is to write exactly what one wishes to have published. But this is utterly impracticable as a matter of routine. The reporter drops in for a minute to ask, "Anything to-day?" Or, perhaps, he wishes some specific information as to prevalent health conditions. He has been through the city hall, getting reports of police court cases here, marriage licenses there, building inspector's permits elsewhere, and so on through the building. To him, only happenings of the day are good for "stories." The information of this kind to be had in the office of the health department is ordinarily little, and he has a natural tendency to dress it up to suit himself.

Not even by actually writing an article oneself can this sensationalism be completely guarded against. There still remain the unknowable editorial or reportorial introduction and the ever-present peril of headlines which are not borne out by what appears beneath them. I recall an occasion when, at the request of the city editor, I wrote a two-and-a-half-column article on the milk supply of Richmond, to appear in Sunday's paper. In order to have it certain to appear correctly, I asked to see proof and was allowed to do so. By the merest accident, when I went back with this proof, the compositor happened to bring into the editorial room his proof of the headlines which the editor had himself prepared. These lines would have created an impression exactly opposite to that which I had aimed to produce in the article itself.

This account of the difficulties of securing thorough cooperation on the part of the press must not be taken as too strong a protest against the methods of editors and reporters. It merely shows a side of the publicity question which must always be borne in mind. We must, on the other side, never forget that newspapers are not conducted primarily for the benefit of our departments and that we can not, therefore, have all these things managed just as we would like.

In spite of all these difficulties, on the whole the advantages of newspaper publicity far outweigh the occasional drawbacks. Perhaps even the sensationalism which is so repugnant to the health officer may not be altogether bad. Certainly it secures a hearing from men and women who in these strenuous times demand highly seasoned pabulum and who, in their hurried reading of the newspaper as they go to and from their work, will not deliberately select and read an article which promises no excitement, even though that article may inform them on vitally important matters relating to

their own well-being. If even an occasional fact of this kind can be made to enter their consciousness along with the more highly seasoned story of the reporter, some good has been done. It is the business of newspaper men to study and learn the methods of reaching the reading public. After all, may not the editor and the reporter understand these matters better than we, and may not the very parts of their stories which irritate and annoy the health officer be the only thing which secures a hearing for us at all in certain quarters where we wish most to be heard?

Certainly, if the newspapers err in their manner of presentation, on the other hand, there is never a time when they will not willingly give any desired amount of space to public health questions. I myself have never encountered a refusal, not even when asking, late on Saturday, for a considerable amount of space in Sunday's paper. Our Richmond papers have repeatedly gone so far, when requested, as to publish in full articles which have appeared in either the morning paper of the same day or the afternoon paper of the day before, and this is a severe test of their friendship, as no newspaper relishes this course.

The health officer may legitimately use, in his efforts to reach the public for its own good, other means, which space will not permit me to discuss here. Monthly or weekly bulletins, special bulletins dealing with matters of special importance, lectures to the general public and to school teachers and children, and even the present-day moving-picture shows, are all means which have much to commend them.

In these, too, the advantages are to some extent offset by peculiar difficulties, and these must either be conquered or else endured as being more than counterbalanced by the good that can be done. The health officer will always find some who are ready to criticize his every attempt in this direction as a mere effort at self-advertising. This, too, he must make the best of, being at all times watchful lest, in spite of himself, this element enter actually into the case. Then, knowing his real motives, he may, with such philosophy as he may command, accept these criticisms, as he must learn to accept the hundreds of others which assail every public servant who regards public office as a public trust.

615 East Franklin Street.

PLEASURES AND HOPES OF THE HEALTH OFFICER *

CHARLES V. CHAPIN, M.D.

PROVIDENCE, R. I.

When Dr. Durgin asked me to write about the pleasures of a health officer I felt that my task was akin to that of the naturalist who essayed the well-known work on the snakes of Ireland. But I remember that my father, who was much interested in ornithology, once shot a white blackbird, and members of the American Public Health Association, familiar as they doubtless are with the principles of biology and with the strange mutations which from time to time appear among plants and animals, may consider it not entirely hopeless to search for pleasure in the routine of a health officer's life.

In the first place, the health officer may usually draw his salary. This, however, is probably not a very great pleasure, and, indeed, on looking up the matter some time since I found that there were many small communities (and this word small may be taken in more senses than one) in which even this pleasure was denied him.

We are told that one of the greatest enjoyments in life is to feel that one's pay is earned by honest labor. This is certainly a pleasure that is within the reach of every health officer, though it may be denied to some unhappy railroad magnates, insurance presidents and promoters of mining propositions. There is no health officer who does not find plenty of work, and there are few who neglect their duties—surely none of the members of our new section. The pleasure of duty well done, which is, indeed, no mean pleasure, is possible for each of us. Rarely can we expect more. The plaudits of the world are not for us. A man's pocket is his most sensitive point, and his liberty is almost as dear as life. Our business, daily and hourly, leads to the depletion of men's pockets and the restriction of their liberty. We can not expect the thanks of those who feel themselves aggrieved. If the neighbor who has been relieved of a long-standing nuisance, or the man who has been saved from rabies by the Pasteur treatment, or the community which has had a smallpox outbreak checked by efficient action, have a good word for us we are more than content. Yet strange things may happen. I have heard of a clergyman, separated from his family by the health officer during a long siege of scarlet fever, who sent a present in token of considerate treatment, and of a family removed to the smallpox hospital who afterward expressed satisfaction that they were not left at home with all the annoyances and trials that home isolation would have involved. The farmer, too, has been known to have a change of heart and to thank the health officer for requiring him to free his herd from tuberculosis; and even the mill owner has in time been led to see the advantages of the improved ventilation that was forced on him. Perhaps even a newspaper which has been bitter in its attacks later comes to advocate the policy which it formerly opposed. These are the white blackbirds which occasionally fly across our field of vision.

To do our duty day by day is, indeed, a pleasure; to abate nuisances, to isolate contagious diseases promptly, to examine school children, to license hogs, to listen patiently to complaints, to diagnose doubtful cases, to record births and deaths, to distribute milk for babies, to vaccinate, to kill mosquitoes, to give out antitoxin, to inspect baby farms, to examine dogs' brains, to distribute circulars, to make blood tests, to back up the family physicians, to keep the reporters good-natured, to answer fool questions, are all in the day's work. Certain things, of which the above items are a mere suggestion, are by common consent required of the health officer. Extensive routine procedures are laid down by the authorities in the text-books on sanitary science. But the health officer, however faithful, who gets into a rut is not doing his full duty. Do not blindly follow obsolete works on municipal sanitation. Sanitation is by no means a finished art, though, judging from the methods employed in some cities, one might suspect the contrary. Every day brings some discovery in the sphere of sanitary science, and every day develops some new application or modification of our art. There can be little comfort in being behindhand in the race. Do not wait for a meeting of the American Public Health Association to be spurred to progress. Keep moving

* Read before the Section on Municipal Sanitation of the American Public Health Association, Winnipeg, Sept. 12, 1908

yourself. Half the pleasure in one's work is in keeping abreast of the times, in taking the best journals, in keeping in touch with the latest discoveries, and in learning what the scientific men of all lands are doing in bacteriology, micro-zoology, biochemistry, serotherapy, vital statistics, and epidemiology, as well as in the more prosaic fields of practical sanitation. If you have not tried it, you can little realize to what pleasure the subscription to, and perusal of, the *Index Medicus* will lead.

A very good friend of mine had inscribed over the fireplace in his club the motto, "Don't Take Yourself Seriously." That is doubtless an excellent motto for a club, for in our social intercourse nothing wearies us so much as the man who can see nothing beyond his own work and aims, and who insists that what is important for him must be important for everybody else. The health officer should not talk sanitation at his club (if he can afford to belong to one) or to his family, or to his bosom friends. He should realize that perhaps religion, and art, and commerce, and agriculture, and even golf and bridge, have their place in the world. While it is folly for the health officer to be serious at all times, and particularly to strive to compel everyone else to make hygiene the chief object of life, yet I firmly believe that he ought to take his business very seriously. Otherwise much pleasure may be lost to himself, and perhaps some good to the world. Even my friend who would bar the serious man from his club, as a manufacturer takes himself as seriously, and successfully so, as any man in the busy little state of Rhode Island.

Sanitary science is an important and fascinating science. Practical sanitation is as immediately useful as any work that man can do. I am afraid that, even with all our glib talk about the value of human life and health, we do not have a full and serious comprehension of our profession. If we did we would make greater effort to perfect our methods and to add something to the store of scientific truth. The greatest pleasure which a health officer can possibly have is to have done something to advance his profession. You and I may not be able to devise a system of school inspection like Dr. Durgin, to inaugurate municipal warfare against tuberculosis like Dr. Biggs, to establish milk depots like Nathan Straus, to invent novel methods of sanitation as has Col. Gorgas at Havana and Panama, to discover the etiology of a disease like Drs. Reed and Carroll, or to find a curative serum like Dr. Flexner; but it should be the ambition, and the reasonable ambition, of every one to add some stone, however small, to the structure of our science, or to improve, however slightly, our practice. We can at least record deaths with accuracy, prepare tables with care, make family histories in cases of contagious disease and note the facts of isolation, disinfection, hospital treatment, vaccination and the use of sera. Every man can learn to observe and to record, and what we want is facts, facts, facts. Every health officer can, and should, write a good report, one which will be a real help to every student of sanitary problems. We must realize how little we know and how much there is to learn. It will then be a duty and the greatest of pleasures to do something, however little, to add something to the mass of scientific knowledge, which some day in the crucible of a mind greater than ours will yield a truth that will bring our science and our art one step nearer the exactness which is our goal.

As for the hopes of health officers, as we are optimists, we have many. We hope for the establishment of a national bureau of health, and we hope that it will not be planned by clergymen, or college presidents, or politicians. We hope that some time the Public Health Reports will be filled with useful information. We hope that every local unit of government will have its health officer, and that the ice-man and the undertaker will not be considered suitable candidates, but that every health officer will be trained for his work. We hope that he will receive a reasonable reward for his services, and that the pay for saving a child's life with antitoxin will at least equal that received by a plumber for mending a leaky pipe; and that for managing a yellow-fever outbreak a man may receive as much per week as a catcher on a baseball nine. We hope that the writers of text-books will some day tell their readers how rare is a typical case of scarlet fever or typhoid fever, and that the medical schools will teach their students that medical science really exists, and that they should not be mere mechanics. We hope some day to issue a permit for the burial of the last doctor who thinks he can diagnose diphtheria and smallpox with his nose; we hope for the day when superstition shall have been banished from therapeutics and when the newspapers shall have forgotten the sewer-gas bogey. We can not expect that figures will ever cease to lie, but we may hope that vital statisticians will. We hope that someone will discover the germ of measles, and of scarlet fever, and will tell us the mode of infection in smallpox and tuberculosis, and why, while so many are carrying the pneumococcus, so few develop pneumonia, and will explain how the fresh-air cure cures. We hope some one will tell us why we condemn beef from the tuberculous cattle, which has never been known to kill any one, and allow the sale of trichina-infected pork, which has killed many, and why we forbid the sale of immature veal because it is indigestible, but do not interfere with the serving of Welsh rarebit! In fine, we hope for the steady advancement of sanitary science and the steady improvement of sanitary practice, and we hope, and are sure, that the new municipal section which is born here in Winnipeg will be a powerful factor for both.

FOOD INTOXICATION IN INFANCY*

JOSEPH BRENNEMANN, M.D.
Assistant Professor of Pediatrics, Northwestern University Medical School
CHICAGO

We are all familiar with the fact that disturbances of the alimentary tract, such as indigestion, summer complaint, ileocolitis, cholera infantum, etc., are commonly accompanied by more or less profound nervous symptoms that in their totality make up the clinical picture of an intoxication. The babies thus affected are listless, drowsy, stuporous, heavy-eyed, with eyes fixed on vacancy, are hard to rouse and quickly sink back into their stupor, which in severe cases may amount to coma. They look as if under the influence of a drug, as if poisoned or intoxicated or "dopey." We have become so accustomed to thinking that such intoxications, characterized as they are by fever, leucocytosis, psychic depression, collapse and evidences of indigestion or enteritis, must be due to a bacterial toxin that a simpler explanation has escaped us. In a series of papers that will serve as models of profoundly critical and convinc-

* Read before the Twelfth Councilor District Medical Society, Fort Wayne, Ind., Oct. 26, 1908.

ing scientific investigation and exposition Finkelstein[1] of Berlin, during the last year, has demonstrated very convincingly, as it seems to me, that these intoxications are not due to the absorption of bacterial toxins, but are the result of a perversion of food metabolism. They are thus rather to be classed with uremia or diabetic coma than with pneumonia or typhoid, for instance. In other words, we have a food intoxication, an "alimentary intoxication," as Finkelstein calls it, or, as Walls has suggested, to avoid the ambiguity of the English term "alimentary," a "metabolic" intoxication. Startling as this view may seem at first, its adoption as a working hypothesis will quickly convince one of its reasonableness, and will lead to practical results that seem almost miraculous. I will only mention in passing that he who sees only one baby, already so profoundly intoxicated that in the light of past experience he can consider death only a matter of hours, within twenty-four hours show marked improvement, and within forty-eight hours every evidence of well-established convalescence, with no treatment of any kind except the withholding of food and the free administration of water—whoever sees this, if only once, is in a receptive mood toward the idea of a food intoxication, rather than one of bacterial origin; when he sees this repeated, in its essential features in nearly every case, with the precision of a law, he becomes convinced.

It is necessary to define still more clearly the meaning of the term "food intoxication" as the subject of this paper. It is in no way synonymous with such indefinite and unscientific expressions as "putrefactive absorption," "intestinal autointoxication," etc. It is not a digestive but a metabolic disturbance. It is not the result of the ingestion of sour, or spoiled, or boiled, or improperly constituted milk or other food. The most wholesome, fresh, nearly germ-free cow's milk, or human milk, or other food, under certain circumstances that will be elaborated later, when given in amounts that exceed the infant's ability to metabolize, can act as a poison as certainly as any drug in the pharmacopeia. Neither do we here have a fermentative or putrefactive change with absorption of toxic products of bacterial activity; the bowels may be nearly normal, usually somewhat loose but not characteristically foul or decomposed. The trouble lies beyond the lining of the intestinal canal. It is in the intermediary metabolism that the toxins are elaborated.

The object of this paper is to analyze and sharply define this clinical picture, to show the reasonableness of its pathogenesis, and, above all, to outline practically a simple, rational and most effective treatment based on this conception.

The symptomatology and clinical setting are perhaps made most clear by considering a typical case such as we see so frequently in the summer time. A child that apparently has been thriving becomes fretful, is less playful, does not care for its bottle, is perhaps slightly feverish; its bowels move three to six or more times a day and the movements are somewhat sour, often pale yellow or greenish, are curdy and show every evidence of indigestion. The baby is not very sick; its weight remains about the same; its food is continued as it has been; and no physician is consulted. A change so striking that it does not escape the mother comes over the child. The baby that has been only a "little upset" for a few days is unmistakably sick, and the doctor is called at once. He finds a pale and listless baby, with heavy, drooping, vacant eyes. The general appearance is one of prostration. The face wears an anxious expression. The child looks as if under the influence of a powerful drug. It refuses all its food but usually takes water freely. Its temperature is 103 F. Its respirations are 50 and labored. The bowel movements are still more frequent than before, sour and irritating, pale yellow or greenish. If the food is continued the child commonly gets rapidly worse, goes into collapse, with marked loss in weight, and may die in a terminal coma. So characteristic is the whole picture that if once familiar with it, one can always recognize it at a glance. It is evident that the condition I have described is not an uncommon one. It is the usual intoxication that accompanies "gastrointestinal disturbances" or "gastroenteric intoxication," or "summer complaint." It is this that I wish to emphasize: that this symptom-complex is not a rare or new thing; that it is one of the most common things with which we have to deal in infancy.

If now we take these common every-day intoxications and analyze them more carefully we shall find that they all have certain well-marked symptoms in common. This symptom-complex can be demonstrated in practically every case, although individual symptoms vary so that two cases superficially may seem to have little in common. It will be worth while to consider these symptoms common to all of them in greater detail.

The first and most striking symptom, the one that gives the condition its name, is the marked psychic depression; the eyes are heavy, more or less fixed, slow to move, half closed; the child looks not only drowsy but in a stupor, which varies from the mildest degree to a condition of coma. At times it is restless with an anxious look, but in every case there is the distinct appearance of an intoxication.

A second very striking symptom is a peculiar type of respiration. The child breathes more rapidly and deeply than normal and there is practically no pause between breaths as in the healthy condition. This symptom varies greatly. At times it is barely recognizable, and again it is so marked that it is hard to believe that there is not some lung trouble. The child may pant for breath at a rate of 60 to 70 respirations a minute, with a sharp expiratory grunt that frequently leads to a diagnosis of pneumonia or pleurisy. To one who has been unfamiliar with this picture it is always a surprise to find how regularly this type of breathing occurs.

The temperature is variable, but as a rule it is quite high, 101 to 104 or 105 F., and in practically all cases is steadily above normal. It has no diagnostic peculiarity. It is often low in very severe cases and high in milder ones, although there is a tendency to parallelism between the degree of fever and the severity of the intoxication.

There is always present a distinct leucocytosis of moderate degree, 20,000 to 50,000. This varies directly with the degree of intoxication. It is of special interest that a leucocytosis may be dependent, as here, on another cause than a bacterial one.

The bowel movements are not characteristic, depending more or less on the preceding condition. Usually there is a moderate to a severe diarrhea, with sour indigested stools. Foulness is not a common condition and certainly not characteristic. Sometimes there is marked constipation so that it is almost impossible to overcome the intestinal inactivity. In a recent case of

1. Finkelstein, H.: Ueber alimentäre Intoxication. Jahrb. f. Kinderh., January, March and July, 1907.

my own, in which the child was in collapse, semicomatose, breathing 65 times a minute, with a sharp expiratory grunt, with tender abdomen, in which repeated injections and cathartics had produced almost no result, only the subsequent diarrhea and course of disease made it certain that there was not intestinal obstruction.

There is always a loss in weight. Commonly this is rapid and persistent. In severe cases there is a state of collapse, with sunken eyes and extreme prostration. The urine always shows the presence of sugar (milk-sugar and galactose) and albumin and some casts. This must not be considered as in any way indicative of diabetes or nephritis. Finkelstein tells us that he has never failed to find these abnormal constituents of the urine in hundreds of examinations, provided, of course, the child was getting sugar or starch at the time.

While every child that has a food intoxication has all of these symptoms, from a practical standpoint of diagnosis there are only a few simple things to consider. The characteristic facial expression, the look of intoxication, in its proper clinical setting, is what we practically base our diagnosis on. The mother of the average intelligence whose baby has once been intoxicated recognizes the condition immediately as *sui generis* when it occurs again. When this appearance is added to a digestive or nutritional disturbance or infectious process, there is no practical need of diagnostic refinement. The type of breathing is of great confirmatory diagnostic value. The fever is of great value in diagnosing both the presence and the severity of the condition. The leucocytosis, glycosuria, albuminuria and cylindruria are of theoretic and purely scientific rather than of practical value except in rare cases. The bowel movements offer nothing that is diagnostic.

An intoxication is never a primary condition. It is always engrafted on some other pathologic state. It appears most commonly as an accompaniment of nutritional and digestive and infectious disturbances of all kinds. Thus it occurs in the course of an enteritis, or dysentery, or indigestion, or overfeeding. But its appearance is by no means restricted to this class of disorders. It occurs as well in connection with any infectious process, outside of the alimentary tract, such as pneumonia, or typhoid, or even in any constitutional disorder that sufficiently influences the whole organism as these do. In other words, the local condition is not the important one. Whenever the general condition of the whole organism has been reduced to a certain point there is only one other factor necessary to elicit an intoxication, and that is food, of sufficient quantity and of a certain composition. Food is the only thing that will, in the presence of these diverse conditions, produce an identical picture of intoxication in all of them, and that intoxication will vary alike in all cases, as the food is maintained, diminished, increased or eliminated. We have here what Finkelstein has called a "metabolic bankruptcy," and it matters little whether it occurs in connection with an enteritis, a typhoid or a nephritis. The one important fact is this: that the giving of food, especially of certain composition, will lead to toxic products of an inadequate metabolism that may and does lead to death, and that the absolute withholding of food will quickly restore the organism to its state of health. The certainty, as of a law, with which results follow the giving or withholding of food, in these so widely different conditions, can hardly be explained on any other hypothesis than that the nature and quantity of the food are the direct factors that determine the presence, or absence, or extent, of an intoxication.

So far I have spoken only of food in general. An infant's food is a complex substance made up of fats, proteids, carbohydrates, water and salts, and these different food elements play widely different rôles in the production and maintenance of an intoxication. Contrary to the still prevalent teaching of our text-books and leading writers, I have long been convinced that the fat is by far the most disturbing element in artificial feeding of infants. Czerny has most clearly shown us what typically follows when we give a child too much milk, and has also demonstrated that the condition is due to too much fat. It will not be amiss to review this briefly because we have here most clearly shown the pathogenesis of food intoxication. The baby that gets more milk than it should have usually becomes restless, pale and flabby and fails to gain in weight or even loses. It is characteristically constipated, the bowel movements being hard, dry, grayish-yellow, or even putty-like in color and consistency, with a strong decomposed odor. They are composed largely of insoluble salts of fatty acids, showing that the fat is the disturbing factor. These overfed babies often stand this abuse for a long time and at first gain remarkably rapidly. Sooner or later, however, in most of them there occurs an acute upheaval that the German writers have aptly called a "catastrophe." There is diarrhea, fever, rapid respiration, psychic depression, etc. In other words, on top of a disorder of nutrition caused by giving too much fat, there is an intoxication, and this intoxication is brought out when the general condition of the child is lowered to such an extent that the amount of food that is given is enough to bring it out. If all food is eliminated for a short time recovery is abrupt and convalescence is uninterrupted if one slowly adds increasing amounts of food. This favorable outcome is certain in proportion as fat is eliminated or used with extreme caution. It is a matter of every-day experience that these patients can not stand cream for a long time, or whole milk except in very small amounts, and yet will stand fat-free milk almost from the start. It was formerly very hard to understand on the basis of an infection why a certain amount of milk would be tolerated, and that every time we exceeded that amount there would be a catastrophe, as we have all seen it hundreds of times.

The following may be cited as a typical case of intoxication following overfeeding with milk:

CASE 1.—Baby H., aged 8 months, weight 16 pounds, had pyelitis at six and a half months. Recovery was complete. Food was gradually increased after this till the child was taking one quart of milk, 18 ounces of water and 8 teaspoonfuls of a proprietary food. The baby vomited somewhat, and was very constipated. The bowel movements were hard, dry, gray and very offensive. The child was restless at night, pale, not gaining as it should after first heavy gain; it gradually refused to take all its milk, finally leaving nearly one-half of it each time.

February 27: The baby took cold, was more irritable than ever. Feverish for two days.

March 1: The baby was quite sick; temperature 101½; respirations 40 and deep. Bowel movements were light gray color, offensive, watery, several during the day. The child looked drowsy. It was put on water with saccharin.

March 2, twelve hours later: The temperature was 103½. Respirations were 60, very rapid and deep, with a sharp expiratory grunt. The child was very pale, listless, eyes drooping, with every appearance of intoxication. The lungs were negative. A diagnosis of possible deep (?) pneumonia with in-

toxication was made. The child was put on barley water with saccharin.

March 3: Temperature, respiration and facial expression were normal; eyes clear and color better. The child looked around. Lungs were negative. Bowel movements were three in twenty-four hours, greenish, loose, slimy. Feeding with small amount of fat-free milk (6 ounces in twenty-four hours, and barley water, 42 ounces) was begun and increased 6 ounces daily till one quart was given; then sugar was added and later whole milk. Recovery was rapid and uninterrupted.

Sugar is even more liable to call out an intoxication and is second only to fat in its tendency to produce a relapse. In fact, the evidence seems to show that the sugar is the only food element that can intoxicate in the manner here described, and that the fat is rather the prominent factor in the prodromal stages and after the intoxication is established, but that it rarely, if ever, alone directly produces an intoxication.

Any one who sees many babies fed on condensed milk, or malted milk—that is, the sugar foods—is well aware of the fact that such infants are peculiarly prone to these "gastrointestinal disturbances" that we recognize as having all of the earmarks of our food intoxication. Many of these babies show this disturbance regularly whenever a certain amount of the food is exceeded. During convalescence sugar will almost as certainly as the fat produce a relapse if increased too rapidly. Formerly when we considered the sugar as the least harmful of all the food elements and gave babies barley water freely with sugar, convalescence was at best protracted, only too often never established. Now we expect it to be rapid and free from relapses, because we eliminate the fat and give sugar only very cautiously in the food for some time.

For many years the proteid of cow's milk, or rather the casein, alone has been the *bête noire* of our pediatricians. To it has been ascribed the chief rôle as a disturber in feeding cow's milk, and around this idea has centered our percentage system of infant-feeding. The theory that this idea is an erroneous one is enthusiastically accepted as yet by a small minority only in this country. Whatever theory may lead us to think, practically the proteid is not hard to digest, as any one can easily demonstrate by feeding milk from which the fat has been removed and the proteid left undisturbed. On account of the complexity of proteid metabolism we might nevertheless expect in the state of intoxication, in which we have a condition of "metabolic bankruptcy," to find that the proteid would be equally harmful with the fat and the sugar. As a matter of fact, neither casein nor albumin will bring out an intoxication, nor will they bring about a relapse although fed in large quantities. Repeatedly in Dr. Walls' service at Wesley Hospital in the profoundest intoxications, in which we would not have dared to give the smallest amount of sugar for days or of fat for weeks, we have given, after one day of hunger diet, more pure washed casein in watery suspension than the child would have received in the amount of milk that would have been proper for it if it had been healthy and have seen no unfavorable results. Our acknowledgment of Nature's wisdom in providing that an infant should have least trouble in digesting and metabolizing the one essential food element, the proteid, is an undeservedly belated one. The following case will serve to illustrate the harmlessness of the casein:

CASE 2.—Baby E., aged 7 months, weight 8 pounds 14 ounces; had always been thin; had had diarrhea for several weeks. The child had been at a home for sick babies, was fed on cow's milk and had been fairly bright till two days before examination (August 9). Then came a marked change. The baby lay motionless and did not even cry, in complete collapse, semicomatose, with eyes sunken, half-closed and fixed, with every evidence of extreme intoxication. It did not seem possible that the child could live twelve hours. Temperature was 99.8. The baby would not take water, seeming too far gone to take it. It was put on water with saccharin. Strychnin sulphate (1/300 gr.) was given every three hours for three days. Water was given with the stomach-tube for two or three times. There were five thin greenish bowel movements in the afternoon and evening.

August 10: The baby was much brighter; it looked around and cried occasionally; its eyes were clearer. Temperature was 99.2. There was no bowel movement. The child took 16 ounces of water in twenty-four hours; its weight was 9 pounds. Food was ordered as follows: Casein of 16 ounces of milk, water 32 ounces, saccharin 1 gr., four ounces every three hours.

August 11: The child was still brighter; smiled. No evidence of intoxication was left. There were two normal skimmed-milk bowel movements, greenish-brown, soft, smooth, with no curds. Temperature was 98.4; weight 8 pounds 10 ounces. The baby took 20 ounces of food.

August 12: Improvement was steady. There was no bowel movement. Temperature was 97.8; weight 8 pounds 5½ ounces. Food was ordered, same as before plus one-half ounce of cane sugar. The child took 25 ounces of food.

August 15: The baby's condition was the same; temperature normal; weight 8 pounds 8 ounces. Sugar was increased to one ounce.

August 17: The child's condition was good in every way. There was one bowel movement in forty-eight hours. Food was ordered as follows: Whole milk, 5 ounces; casein of 11 ounces of milk; water, 14 ounces; cane sugar, 1 ounce; six feedings, 5 ounces each, to be given every four hours.

August 20: The bowel movements were more frequent and greenish. The baby was put on skimmed milk, 15 ounces; water, 15 ounces; sugar, 1 ounce. On this and buttermilk it made steady progress.

August 30: The baby's weight was 9 pounds; its condition excellent in every way.

The exact nature of the toxins is not yet known. The condition is probably analogous to an acid intoxication. The chief interest centers in the idea that we have here toxic substances that are apparently of alimentary, not of bacterial or intestinal origin. This idea is supported by the following considerations:

1. In many cases of fatal intoxication coming to autopsy no demonstrable pathologic lesions are found in the alimentary canal. It is almost unthinkable that a bacterial invasion of the mucosa would leave no signs when the evidences are so manifest in the known inflammatory lesions, such as ileocolitis, enteritis, typhoid, etc. In an intoxication the abnormal conditions that may be present are those of the condition on which it may be engrafted.

2. If a symptom-complex, so alike under all circumstances under which it may arise, were due to a microorganism, one would expect that there would be a certain specific organism, or group of organisms, with which it would be associated constantly. There is apparently no such connection.

3. It hardly seems possible that in any bacterial invasion of the intestinal wall, such as we have in the known infections like typhoid or ulcerative ileocolitis, we could remove all symptoms within twenty-four or forty-eight hours by any process, and certainly not by simply withdrawing food. In a known infection starvation will not prevent it from running its course. Furthermore, we would not expect different food elements to have so different an action under such ana-

tomic conditions. It is hard enough to see how food could have any influence, much less one so selective. And yet here the course of the disease can be influenced at will with the precision and certainty of a laboratory experiment, can be made better or worse to any degree, by simply increasing or diminishing or eliminating the fat and the sugar of the food.

4. The fact that these intoxications occur in such widely different infections as pneumonia or sepsis or other non-alimentary affections, yet have in all the same characteristics, are in all influenced in exactly the same way by different food elements, can certainly be accounted for more easily by assuming a food intoxication than by assuming a secondary intestinal infection, of which there is no pathologic evidence.

5. From the known behavior of an intoxication, under the influence of different amounts of certain food elements, it is likewise hard to believe that we have here to deal with the absorption of putrefactive or fermentative or other products that are the result of bacterial activity within the intestine. The appearance and odor of the bowel movements do not suggest such a condition. Furthermore, we ordinarily associate putrefaction and toxic products of bacterial activity with proteids, not with sugar and fat; yet here the proteids are innocuous or unimportant, and the fat and the sugar all-important.

What part bacteria play in the primary conditions that precede the intoxications, especially in the gastro-intestinal cases, it is impossible to say at the present time.

The treatment of these intoxications is more or less evident from the pathogenesis and is as satisfactory as it is simple. We have here to deal with a food intoxication, and the important step is to withhold all food for a sufficient period of time. This simple procedure, in cases of moderate severity, will produce a normal temperature and absence of evident intoxication within twenty-four hours; in severer cases within forty-eight to seventy-two hours. In some few extreme cases this may take a week or longer. It is, of course, extremely desirable to give water freely during this time. With plenty of water alone a child can live many days; without even water only a comparatively few days. If not well taken the water can be sweetened with saccharin (1 grain to the quart), but not, of course, with sugar. Weak tea can be given in its place, as is done so much in German clinics. Barley water is practically harmless in these cases and can be given in place of water or tea if desirable for any reason. If at the end of twenty-four or forty-eight hours the baby has a normal temperature, a clear eye, is no longer toxic, and has greenish-brown, rather slimy-looking bowel movements that are characteristic of hunger or cereal-water diet, we can begin to give it small quantities of food. Since proteid is the most easily taken and the one essential food element, we naturally turn to a milk that is free from fat as the first food to give. We give then a small amount of skimmed milk in our barley water or water, five to ten ounces, for instance, in the twenty-four-hour food. This carries a little sugar with it but not enough to do any harm. Whey is manifestly not a proper food because it is practically a sugar water with a small amount of lactalbumin and salts. We now expect more rapid recovery where formerly we were accustomed to a prolonged convalescence when we used whey freely. The more completely fat-free our milk is, the surer is the result. There is often a striking difference between a milk that has had the cream poured off, or dipped off, or siphoned, and a milk that has had the fat removed by the separator. When the fat-free milk is well borne for a day or two, or more, one can safely add a small amount of sugar and very gradually increase this to the amount that the child ought to have if healthy. Only after days, or weeks, or even months, can we safely begin gradually to substitute whole milk for fat-free milk, under careful control as to temperature, facial expression, bowels, etc. The severer the case the slower must be our progress and the more carefully controlled, for in these cases a sudden increase of fat or sugar may lead to most serious results.

A case recently came under my observation, in which in the beginning of the fourth week following an intoxication with painfully slow but steady convalescence, a fatal termination was apparently brought about by the substitution of a diluted whole milk for a fat-free milk of equal dilution.

Drugs occupy a very minor place in the treatment. It is doubtful whether even the preliminary cathartic has much value except for the constipated cases. If indicated, stimulation is, of course, to be resorted to. Alkalies may be of some value.

If the child refuses water, or vomits, as is often the case, the water must be given as normal salt solution per rectum, or by lavage, or in extreme cases under the skin. The child must have water.

The urging of therapeutic starvation may seem trite and commonplace enough. But our knowledge of the cause of these intoxications, as well as of the digestive and nutritional disturbances, and the reasonableness and effectiveness of this procedure based on this knowledge gives to this hunger diet a new and added meaning that justifies added emphasis. "Cutting down the food," "lowering the percentage," "cleaning the baby out with calomel," "giving barley water with sugar" as a routine are not the same thing as withholding for a requisite time, for an obvious reason, all food except water. That convalescence follows a less radical treatment is, of course, to be expected in most cases, but it is at best protracted and less certain. A patient poisoned with strychnin will recover unless the dose was too large, even if mistakenly further strychnin is given as a stimulant; but such a procedure would certainly be poor treatment. Radical starvation is to my mind the greatest weapon in our armamentarium.

If at any time during the convalescence there is a relapse because of too rapid increase in food it is just as desirable as in the first instance to go back to a hunger diet again—and the less one compromises with that procedure the better. We have here a reintoxication, and we must disintoxicate before it is safe to go on again. I think that this is a point which requires special emphasis because it is not observed sufficiently. The amount of food that a child can stand depends on its immediately present condition. A child has been intoxicated. Slowly we work up to twenty ounces of fat-free milk, for instance. We add one-half ounce of sugar or five ounces of whole milk to-day. The child may be reintoxicated to-morrow because of this addition. It is then no longer safe to go back to the twenty ounces of fat-free milk—we must go back to the beginning and start over again. In treating a case of this kind one can not map out a long course of feeding—new changes can rationally be made only when one knows just what

the condition of the child is at the time of the proposed change.

The thought naturally occurs that one must be very heroic to take all food away from a baby that seems starving as it is, and especially before parents whose one thought is to get the baby back on its food again. The difficulty is not nearly as great as one might think. As far as the baby is concerned, if the hypothesis of a food intoxication is true, it is evident that the baby can not be too weak or too near starved, but that the absence of food will be better for it than to increase its intoxication by giving more. The baby is now weak and sick, not from hunger but from a food intoxication. If it can stand it, removing its food will leave it hungry but convalescent. If it can not stand the starvation it is manifestly doomed. Even in cases that seem hopeless the change that is often produced in one day by simply removing the food is so evident that one soon loses that fear of too prolonged starvation that is bound to possess one at first.

As to the parents, it is my experience that there is practically no difficulty in getting a mother of average intelligence to do anything for the baby that is explained to her and seems reasonable. If she is told that there is a food intoxication, she can easily be led to see that the thing to do is to remove the food. When she sees what a wonderful change this produces within twenty-four hours, with no other treatment, she is just as convinced and enthusiastic as the doctor. It becomes a very common experience that mothers whose babies easily exceed their food tolerance will call up the doctor at the end of the twenty-four-hour fast that they have instituted themselves. They know very well that the fast was indicated, and now they want to know whether it was long enough and if so how much and what food they can give. In very severe cases, in which prolonged absence of food is indicated and one is not sure about the mother, one can give what looks like a gradual increase of food, say water, then tea, then albumin water or barley water, any one of which is harmless, at least after the first twenty-four hours, and yet will satisfy the mother, while the baby is getting the necessary starvation.

Is there any way of recognizing an impending intoxication so that it can be warded off? An intoxication never bursts forth fully developed. It is always preceded by prodromata that are usually easy to recognize. These may be of long or of very short duration. This is best shown in the cases that accompany digestive or nutritional disturbances. The child becomes unusually fretful and cries much of the time. It fails to gain, or even loses, the weight varying widely from day to day. The bowel movements show decided evidence of indigestion, are more frequent in number, four to five or six times a day, pale in color, or greenish, sour and irritating. If to this is added a variable temperature with occasional spurts of fever up to 100 or 101 not due to some other evident cause, there is an impending intoxication. The temperature of a healthy baby is remarkably constant. In hospital babies in which the temperature and all of the symptoms are quickly recognized we can see these cases coming on, gradually increasing in severity, and passing over without interruption into a full-fledged intoxication. In the prodromal stage it is only necessary to lessen the food to a safe amount and the symptoms will disappear. Mothers are quick to learn the significance of the prodromal stage, and after one or two experiences will tide the baby over the danger themselves the next time by lessening the amount of food.

In the prophylaxis, further, of intoxication, overfeeding must be avoided, absolutely in health and relatively in sickness. The practical value of a strict caloric control of the healthy infant's dietary along the lines laid down by Heubner can hardly be overestimated as a check on overfeeding and the resulting intoxications. In acute illness of any kind that lowers the general condition of the infant the food should be lessened to a safe amount and in a definite manner. Since fat is the chief disturbing element in infant-feeding, it would be unwise to use cream mixtures, and for several years we have used no cream whatever in our diet kitchen at Northwestern University Medical School. In the prodromal dyspeptic stage of an intoxication we have come to fear even diluted whole milk, and have found the partial or complete temporary elimination of fat one of our most valuable therapeutic measures. It is evident that we must guard against the use of too much sugar in our mixtures, and that such foods as condensed milk, malted milk, etc., should be used with great caution if for any reason they should seem indicated. The adoption of a four-hour interval as the usual one between feedings would do much toward the prophylaxis of overfeeding and so of intoxication.

The relation of human milk to these food intoxications is of peculiar interest. We are accustomed to think of mother's milk as the last resort—that if this fails there is no use trying anything else. Doubtless many of us have in extreme cases placed a child on human milk and have been surprised at the sudden and emphatically serious change for the worse. We have here one of the strongest confirmations of the truth of the theory of a food intoxication. If a child in a state of intoxication can not stand fat and sugar there is no reason why it should bear them any better because incorporated in human milk. There is a vast difference in many ways between human and cow's milk fat, and yet they both act as fat in this connection. Salge has demonstrated that these babies can stand a large amount of centrifuged human fat-free milk, though a very small amount of whole milk would produce serious results. A baby can indeed become intoxicated on human milk, disintoxicated on water, reintoxicated on human milk and even on a skimmed or siphoned human milk that is not nearly fat-free, redisintoxicated on water, and then carried safely through convalescence on a centrifuged cow's milk that is practically fat-free. In other words, as we would expect theoretically, an intoxicated baby that can not take human milk will still be able to take a fat-free cow's milk. This is shown in the following case:

CASE 3.—Baby S. (Figs. 1 and 2), aged 6 weeks, had been at the breast and well till four days before examination (July 28, 1908); since then had had a violent diarrhea, ten to fifteen bowel movements daily; did not vomit. Temperature was 100. It had nursed every one or two hours and appeared severely intoxicated. The baby was put on water; it was not to nurse.

July 29: The baby had taken little water. The mother gave it the breast once, possibly oftener. The baby was much worse, in extreme collapse, slightly cyanotic, and semi-comatose, with eyes sunken, half open, dry and fixed (Fig. 1). Temperature was 100. The child's condition seemed hopeless, but it was taken to Wesley Hospital. Tea with saccharin was given by mouth and normal salt solution by rectum.

July 30: The baby was brighter; cried a good deal; and still looked intoxicated. The tissues were hard and stiff. Temperature was 98 to 100. Normal salt solution was stopped

and 3 ounces of siphoned human skimmed milk given with tea this afternoon and during the night.

July 31: The baby was decidedly better this morning; looked brighter, and presented practically no evidence of intoxication. There were seven greenish-yellow bowel movements, some curds, normal odor and color. Temperature was 98.6 to 99.8. The allowance of skimmed human milk was increased to 5¾ ounces in tea.

August 1: The baby was not nearly so well; looked drowsy, heavy-eyed and "dopey" again; was very pale and hard to rouse. It was almost impossible to get it to take the bottle. It seemed nearly as sick as when first seen. Temperature was 99.2. There was six bowel movements. On account of relapse the child was put on equal parts of fat-free cow's milk and water, alternating every two hours with albumin-water.

August 2: The child was brighter again. Temperature was 99.8. There were five bowel movements, smooth and well digested. The child improved steadily on this and by the end of the week was bright, had a better color and took its food eagerly. During the second week it gained 14 ounces on a fat-free cow's milk, barley-water and sugar mixture, with the addition of a little nursing from the mother. The baby was discharged on the fourteenth day in excellent condition in every way.

The fact that human milk may be but little less dangerous than cow's milk in its relation to intoxica-

Fig. 1.—Baby S. (Case 3), 6 weeks-old, weight, 7 pounds 10¼ ounces. Intoxication on mother's milk. July 29, 1908.

Fig. 2.—Baby S. (Case 3), after one day of water diet; weight 7 pounds 9½ ounces. July 30, 1908.

tions is of great practical value in those cases in which we use a wet nurse as a last resort. It is manifestly not wise to put such a baby, one whose food tolerance is very narrow, at once on food so rich in fat and sugar as that given by the breast. We must proceed with extreme caution. If there is still an unfavorable reaction to minimal amounts the child may yet be saved on fat-free cow's milk or, as the last resort, on fat-free human milk. The following case illustrated this:

CASE 4.—Baby S., aged 7 months, weight 9 pounds, had nursed only a short time and had never gained as it should. It easily reached the limit of milk toleration. This was a typical case of malnutrition.

November 30: The child was somewhat overfed on milk, 12 ounces; barley-water, 18 ounces; milk-sugar, 1 ounce, and malt extract, ¼ ounce. The baby was pale, restless, cried a great deal and was constipated. It was put on water for twenty-four hours.

December 1: The child slept well and was better in every way. It was put on the same food, omitting the malt extract.

December 2: The baby was good for one-half day; then had a miserable night, was fretful and cried a great deal. The bowel movement was slimy and frothy. The child's weight was 9 pounds. It was put again on barley-water without sugar for twenty-four hours to prepare it for the wet-nurse. Temperature was normal.

December 3: The baby took the breast with abundance of milk every four hours; seemed perfectly contented and comfortable. Its weight was 9¼ pounds.

December 4: The baby had a restless night, looked pale, not as well; it had two grayish-yellow, greasy bowel movements. Its weight was 8¾ pounds.

December 5: The baby was very much worse. As the mother said, he was "really sick for the first time in his life," was peevish and fretful for the first part of the twenty-four hours, then listless and waxy, drooping heavy eyes, taking no notice of his surroundings, but wanting to be let alone. The child had the typical appearance of intoxication; was "feverish," according to the mother. Temperature now was only 98.6. One-half teaspoonful of castor oil was given and the child put on barley-water with saccharin.

December 6: The child was very much better; smiled and had wholly lost the intoxicated look but was still very weak. Its eyes were clear; temperature normal. The baby was put on centrifuged fat-free cow's milk, 5 ounces in twenty-four hour food with barley-water.

December 7: The baby was as bright as before it took the breast. The skimmed milk was increased to 10 ounces, and on the following day to 12 ounces and ½ ounce of sugar. Convalescence was uninterrupted on fat-free cow's milk, barley-water and sugar.

The views that I have expressed here have hardly yet entered into our literature. To my mind, they carry in a large measure their own conviction with them. To some of us they appealed at once because they illuminated wholly many a dark corner in our past experience. With this knowledge we could have saved many a baby that we literally fed to death. To one who is in doubt about the truth of the things that Finkelstein has taught us I can only say: Use this idea as a working hypothesis as we have done, and see how many babies you can save who otherwise might die. Still more important, see how many babies you can keep from getting to that point by bearing in mind the pathogenesis of food intoxication.

4549 Indiana Avenue.

THE PHARMACOPEIAL REVISION METHODS OF FOREIGN COUNTRIES

H. V. ARNY, PH.G., PH.D.
Professor of Pharmacy, Cleveland School of Pharmacy
CLEVELAND, OHIO

As it was thought that a comparison of the pharmacopeial methods in other countries might be of service in considering the revision of our own national standard, a list of queries relative to pharmacopeial revision was sent to correspondents in eleven of the leading countries of the world.

The list of topics included size and personnel of revision commission; frequency of revision; time taken in preparing new edition; tenure of revision commission; and issuing of supplements.

Out of the eleven persons addressed, answers came from nine, no responses being received from Greece and Sweden. The data obtained from the other countries was as follows:

Austria.—Present issue, Jan. 1, 1907; prepared by commission, which was appointed by the government, and is composed of 5 physicians, who are professors of the University of Vienna and members of the Supreme Board of Health. Revision was begun Jan. 1, 1905, and finished in November, 1906.

The pharmacopeia is revised every ten years and a supplement issued every two or three years. The commission is a permanent body. Correspondent, U. S. Consul-General Rublee, Vienna.

France.—Present issue, 1895; prepared by a commission, which was appointed by the government, and is composed of 6 professors of medicine, 5 members of the Faculty of Medicine, 6 professors of pharmacy and the 4 officers (president, secretary, etc.). Revision was begun in 1881 and finished in 1895; occasional supplements have been issued. Correspondent, U. S. Consul-General Mason, Paris.

Germany.—Present issue, Jan. 1, 1900; prepared by a commission, which was appointed by the government, and is composed of 14 physicians and 13 pharmacists. Revision was begun in 1898 and finished in 1899. The pharmacopeia is revised every ten years and no supplements are issued. The commission is a permanent body. Correspondent, Prof. E. Schmidt, Marburg.

Great Britain.—Present issue in 1898; prepared by the General Council of Medical Education and Registration of the United Kingdom, which is composed entirely of physicians, who, however, asked aid of an advisory committee of pharmacists, appointing the pharmaceutical chemist, Professor Attfield, as editor of the work. There are no regular periods of revision. The first edition was issued in 1867, the second edition in 1885, and the third edition in 1898. Supplements to the first edition were issued in 1876; to the second edition in 1890. Correspondent, Prof. F. B. Power, London.

Italy.—Present issue May, 1892; prepared by the Superior Board of Health, which was appointed by the government. The commission is composed of the following ex-officio members: The director-general of Health Office, the king's attorney, the medical inspector of the army, the medical inspector of the navy, the director-general of agriculture and chief veterinary of the army, together with 21 active members appointed by the government, mostly physicians, professors of chemistry, professors of pharmacy, etc. Supplements are issued when needed and made effective by royal decree. Correspondent, U. S. Consul-General de Castro, Rome.

Japan.—Present issue, 1906; prepared by a committee, which was appointed by the government, and composed of 7 physicians and 10 pharmacists. Revision was begun March, 1900, and finished March, 1906. The pharmacopeia has been revised three times since 1886. The present committee is permanent and supplements are issued. Correspondent, Dr. Tokichi Takamine, New York.

Russia.—Present issue, 1902; prepared by the Medical Council of the Ministry of Interior, which is composed of 40 members, mostly physicians, but also including 3 chemists, 1 professor of pharmacy, 2 veterinary surgeons, 2 deputies of the St. Petersburg Pharmaceutical Society, 1 engineer and 3 attorneys. There are no regular periods of revision. The fourth edition was issued in 1891; the fifth edition is the present; a new edition is now being prepared. Apparently, no supplements are issued. Correspondent, Straatsrath Johannes von Martenson, St. Petersburg.

Spain.—Present issue, 1905; prepared by a commission, which was appointed by the Royal Academy of Medicine, and is composed of 3 physicians and 4 pharmacists. Revision was begun in 1903 and finished in 1905. There is no regular period of revision and there are no yearly supplements. The commission is a permanent body. Correspondent, U. S. Consul R. M. Bartleman, Madrid.

Switzerland.—Present issue, March 1, 1908; prepared by a commission, which was appointed by the Swiss Bundesrath (the highest governmental organization), and is composed of 19 consulting members (18 physicians and 1 veterinarian) and 30 working members (1 professor of chemistry, 2 professors of pharmacognosy, 2 professors of pharmaceutical chemistry, 1 representative of the chemical industry, 1 food chemist, and the rest pharmacists). Revision was begun March 17, 1902, and finished March 6, 1907. The pharmacopeia is revised irregularly. The first edition was issued in 1865; the second in 1872; the third in 1893; the fourth edition is the present one. No supplements are issued and there is no permanent commission. Correspondent, Prof. A. Tschirch, Bern.

SUMMARY

Appointment of Revisers.—In all the countries cited above, the government has direct or indirect control; this is in marked contrast to the democratic method of selecting revisers in this country.

Personnel of Revision Committee.—The number of revisers ranges from 5 in Austria to 49 in Switzerland, while the ratio of physicians to pharmacists varies from a board of all physicians in Great Britain and Austria to a proportion of 10 pharmacists to 7 physicians in Japan.

Time Required for Revision.—The last German Pharmacopeia was revised in one year, while the last French Codex took over ten years. Switzerland and Japan took five years for revision, even as did the committee which revised our present Pharmacopeia.

Frequency of Revision.—The periods intervening between revisions are mostly irregular. No pharmacopeias have been revised more frequently than once a decade, the period prevailing in this country.

Supplements.—These have been issued in Austria, France, Great Britain, Italy and Japan. The other pharmacopeias, like that of this country, are not supplemented.

CONCLUSIONS

To draw from the foregoing data conclusions that will be of service in revising our own Pharmacopeia is a matter of some difficulty, as the conditions existing in other countries differ so markedly from those of our own land.

The method of selection of the revision committee that obtains in this country is completely in accord with the spirit of our democratic form of government, and it would be unfortunate, indeed, to replace our present Pharmacopeial Convention, with its delegates from medical and pharmaceutical societies, and the Committee on Revision which said convention elects, by a commission appointed by the government, like those which prepare the foreign pharmacopeias.

While a small number, for instance, seven members as in Spain, would seem to give a more compact, more workable body, it is significant that two of the best pharmacopeias of the world — those of Germany and Switzerland—were prepared by commissions larger than our last Committee on Revision. That a goodly proportion of the revisers should be pharmacists, since a large amount of revision consists merely of pharmaceutical and chemical details, will be admitted even by physicians; but whether the medical representation should be as scanty as prevailed in our last Committee on Revision is debatable.

As to frequency of revision, it is noticed that in those countries where the revision committee is a permanent body, the work of revision, as might be expected, was accomplished in less time than in our country, where each revision is taken up by a new organization, not necessarily containing a majority of the members of the previous committee. The fact that the last German Pharmacopeia was revised in one year is the best possible argument for a permanent committee. Moreover, the permanent existence of the committee would permit the publication of yearly supplements, a step that, in these days, is highly advisable.

In conclusion I desire to express my warm thanks to the correspondents mentioned above who so generously afforded me the information necessary to prepare the data from which this paper is prepared.

THE DIAGNOSIS OF INTESTINAL PERFORATION IN TYPHOID FEVER

ALFRED JEROME BROWN, M.D.
Attending Surgeon, Rome Hospital
ROME, N. Y.

Without doubt the greatest bugbear to physician and surgeon alike in the management of typhoid fever is the ever-present liability of intestinal perforation.

This complication occurs in from 2.5 to 3 per cent. of all cases of typhoid. Furthermore, according to Osler, one-third of all the deaths in typhoid are due to intestinal perforation; and when we come to consider that, from statistics collected by Taylor, in the United States alone there are estimated to be 500,000 cases of typhoid annually, with 75,000 deaths, we are confronted by the astounding fact that about 25,000 persons die annually from intestinal perforation due to typhoid fever. It therefore seems that anything which may add to the knowledge of this condition is acceptable.

Twenty-four years ago Leyden advocated the surgical treatment of typhoid perforation and Mikulicz performed the first successful operation for the condition, and for the first time a ray of hope appeared in a condition which up to that time had appeared practically hopeless. But, in spite of the fact that the operative treatment is now and has been well known for some years, Harte and Ashurst were able to collect only 362 published reports of operations up to January, 1903. These cases gave a mortality of 74.3 per cent., thus showing that something had been done toward checking the death rate. At the Atlantic City session of the American Medical Association in June, 1907, J. E. Allaben reported 162 operations as all that he could find reported from January, 1903, to January, 1907, and these gave a mortality of 62.34 per cent., a decrease of 11.69 per cent., evidently due to improved surgical technic and earlier diagnosis. Doubtless many cases have not been reported; but when we consider that in twenty-three years only 524 cases have been reported, we can not deny that many cases among the thousands that have occurred must have gone unrecognized and that consequently the point in which we are lacking most is diagnosis, and more than that the early diagnosis, for it is an easy and simple matter to make a diagnosis of the peritonitis following a perforation, but it is far more difficult and by no means easy to make a diagnosis of the perforation itself.

TWO NEW SIGNS OF PERFORATION IN TYPHOID

It has been my privilege to follow seven cases of typhoid perforation. While following and studying these cases I observed two signs which seem to me to be important in the early diagnosis of perforation and to which, so far as I know, attention has not been called.

The first sign, for want of a better description, I have designated as the "dipping crackle" and is exemplified by the following case:

CASE 1.—*History.*—A. L., female, aged 30, came under observation on the twentieth day of her disease. The onset and course of the disease had been typical but severe, and for three days before coming under observation she had had wild delirium, which had almost disappeared at the time I first saw her. On the evening of the twenty-first day of the disease she complained of a sudden severe knife-like pain in the right iliac fossa which was made worse by coughing. Her pulse became rapid, finally reaching 130 and changed in character, becoming smaller and showing increased tension to the finger. Respirations became rapid and labored but diaphragmatic respiration was maintained. The abdomen was distended, the area of liver dulness was gradually replaced by abdominal tympany and the heart became pushed to the left. The temperature gradually rose and about four hours after the onset of the symptoms she had a chill lasting ten minutes, and following this the temperature suddenly rose to 106 F. There was no change in the leucocyte count. There was well-marked tenderness and rigidity in the lower half of the abdomen and especially in the right iliac fossa. There were no signs in the lungs except a little more dulness in the right axilla and at the right base. There was no vomiting or restlessness.

The "Dipping Crackle" Sign.—At the first examination, which took place a few minutes after the perforation, on placing the bell of the stethoscope over the right iliac fossa and dipping suddenly with it as in dipping palpation, a very fine crackle was heard which sounded much like a fine crepitant râle, or as if two sticky surfaces were being drawn apart. This sign was present in three of the seven cases and appears to me to be a rather valuable confirmatory sign, as it seems to be due to the fact that in dipping suddenly the parietal and visceral layers of the peritoneum come in contact for an instant and, apparently, the inflamed surfaces stick together for a moment and then pull apart. I have never found the sign present over an area of more than two inches in diameter and never later than four hours after the initial symptom, presumably because the accumulated gas prevents the surfaces from coming in contact.

The second sign to which I desire to call attention is shown in the following case:

CASE 2.—*History.*—W. C., male, aged 17, was taken ill suddenly and had been in bed only two days when he came under observation. The initial attack lasted only thirteen days, and during this he had an enlarged spleen, rose spots, and typhoid tongue, but no Widal reaction. After being normal for twenty days the temperature rose suddenly and he entered on a relapse. The spleen again became palpable and rose spots appeared but the Widal reaction did not become positive until the eighteenth day of the relapse. In the meantime two blood cultures had been taken and were negative. On the fifteenth day of the relapse he had a small hemorrhage and following this his fever remained fairly typical of the disease but rather long drawn out, until finally on the thirty-fourth day of the relapse he suddenly complained of a sharp, excruciating pain in the end of the penis on micturition. There was no change in temperature, respiration or leucocytes.

Second Sign of Perforation.—The patient was examined immediately and a small area of tenderness found low down in the right iliac fossa. He was turned on his left side and in half an hour the area of tenderness had moved toward that side about two inches.

Operation.—He was immediately prepared for operation, but owing to the fact that permission could not be obtained until his parents could be consulted, operation was delayed for four hours. The temperature meanwhile had been taken hourly, and it was not till five hours after perforation that it showed any change and then there was an abrupt rise to 105.4 from 101 F., with a corresponding rise in pulse to 118 from 86 and in respiration to 28 from 20. There was no vomiting, no loss of liver dulness, nor was there dulness in the flanks. He was operated on, the perforation found and sutured, and he eventually recovered.

The sign to which I desire to call attention, and the one in this case which practically clinched the diagnosis, was the fact that when the patient was turned over on his left side the pain and tenderness, so to speak, followed the turn and that fairly rapidly. Since seeing this case it seems to me that on the occurrence of a sudden pain in a case of typhoid the patient should immediately be turned on the side opposite the pain, and if the pain and tenderness follow the turn in from fifteen minutes to half an hour the diagnosis may be considered confirmed.

The explanation of the sign is simple. At the time of perforation there is a greater or lesser amount of the contents of the intestine extruded into the peritoneal cavity, and this extravasation tends to flow in the direction of least resistance, that is, downward, and its extension is marked by the indications of local peritonitis, pain, tenderness and rigidity. By turning the patient over on the unaffected side that side is made the lowermost, and if there be a perforation with extravasation the signs of the extension of the local peritonitis will pass to that side which is lowermost.

THE SIGNS AND SYMPTOMS OF PERFORATION IN GENERAL

In looking over the series of seven patients whom I attended I find that all the cases were rather peculiar. Two were practically ambulatory cases, two occurred in long drawn-out relapses, one—a severe case—was complicated by tertian malaria, and one was unusually severe and complicated by mental symptoms throughout. Of the seven patients four were women and three men; usually this proportion is reversed.

Two of the patients had had hemorrhages before perforation. In only one had there been any marked distention of the abdomen.

Perforation occurs as a rule at some time between the end of the second week and the fourth week of the disease and is more apt to occur in ambulatory cases or in cases with distention or hemorrhage.

Of all the symptoms, pain is the most marked and important one. This as a rule is sudden in its onset, sharp and severe and of a cutting or boring character. At first the pain is localized and later spreads, and this method of its spreading according to the position in which the patient lies I wish to emphasize, as it seems to me to be about the most pathognomonic symptom of typhoid perforation that we possess.

Pain may be present in other conditions in typhoid, notably in thrombosis of the iliac or femoral vein, but the differentiation is not difficult, as both the character and localization of the pain are different. The pain in the right iliac fossa occurring early in the disease may be mistaken for appendicitis, but usually occurs too early in the disease to be mistaken for perforation.

Pain may be absent, but only in those cases in which the sensorium is so blunted by the disease that the patient does not complain of it. One such case occurred in my series and in this case the diagnosis was made by the restlessness of the patient. I believe thoroughly that in all other cases pain is the one early, definite and constant symptom.

Tenderness usually follows or accompanies the pain, and in somnolent and delirious patients may be present when pain is not complained of. After a movement of the bowels (as in two cases in my series) the pain and tenderness may disappear, and this must be borne in mind or it may prove misleading. Even if they disappear it will only be for a short time and then there will be a recurrence.

Rigidity, if following or accompanying a sudden pain in the abdomen during the third or fourth week of typhoid, completes the chain of symptoms and to my mind makes the diagnosis positive. That it may not always be present was shown by one case in my series in which operation was delayed because of the lack of this sign, consequently I differ from Harte, who states that rigidity is never wanting except in patients with unusually large and pendulous abdomens.

The other signs and symptoms usually cited—chill, nausea, vomiting, rise of temperature and pulse, loss of liver dulness, shifting dulness and loss of abdominal respiration—are to be taken simply as confirmatory symptoms which may or may not be present. The "dipping crackle," as I have called it, seems to me to be a valuable confirmatory sign if present. All these symptoms should be considered as due more to the peritonitis following the perforation than to the perforation itself, and should on no account be waited for in order to establish the diagnosis.

I believe that the increase in leucocytes is absolutely valueless except as a confirmatory sign. It is so often absent until hours and, in some cases, days after the perforation. As Cushing states, "an individual observation at such a critical time may be misleading; in the first place, a condition of hypoleucocytosis is often characteristic of the fever, and a count apparently within the normal limits of 8,000 to 10,000 may actually represent a double increase in the number, and secondly, because by a single count the 'transient wave of leucocytosis' may entirely escape notice." In my series of cases in which the leucocyte count was followed closely throughout the disease, being taken every one or two days as a routine, it proved of little or no value as a diagnostic aid. Consequently I believe that, in private practice, the leucocyte count, except as a matter of scientific interest, can well be dispensed with and on no account should operation be delayed in order to wait for the result of a count.

There is one sign concerning which much has been written of late that I am sorry was not observed in all the cases in my series, and that is the variation in blood pressure. It has been stated that a transitory rise of from 20 to 30 mm. of mercury occurs immediately after the perforation. In my series, although the sphygmomanometer was not used, there was in several patients a change in the tension of the pulse which was perceptible to the examining finger, the pulse becoming distinctly smaller and more wiry. In one case that I observed the sphygmomanometer was used and showed a rise from 96 mm. of mercury to 132 mm., the reading being taken with the Janeway instrument. A diagnosis of perforation was made and the patient operated on, but it proved to be a case in the pre-perforative stage.

TREATMENT

There is only one treatment; that is operation, and that immediate. I have reported two patients operated on in whom perforation, although suspected, was not found. In neither of the cases did operation in any way militate against the patient's chance of recovery; it rather seemed to be beneficial, for in one case it caused the temperature to fall to normal in addition to relieving the pain, and in the other it relieved the pain. After seeing these two cases I should unhesitatingly recommend operation even if the diagnosis were supported only by a strong suspicion.

CONCLUSION

1. Perforation occurs as a rule in the latter part of the second, in the third, or in the fourth week of typhoid, especially in ambulant or atypical cases.

2. The initial symptoms are sudden severe lancinating pain in the lower part of the abdomen and generally in the right iliac fossa, and usually tenderness, there may or may not be rigidity. The other symptoms usually described are merely confirmatory if present, and

the majority of them are due to the peritonitis following the perforation and not to the perforation itself.

3. Two signs, hitherto undescribed, appear to me to be valuable as confirmatory evidence, namely, the one that I have designated as the dipping crackle, and the tendency of the pain and tenderness to approach the side that is lowermost if the patient be turned on the side.

4. In the management of a case of typhoid the attending physician should uncover the abdomen at least once a day and carefully and thoroughly examine it. In the light of recent work, blood pressure should be taken daily if possible. Nurses should be impressed with the extreme importance of pain in this disease.

5. On the occurrence of a severe sharp pain in the lower part of the abdomen, and especially in the right iliac fossa, accompanied by tenderness, with or without rigidity, the abdomen should be carefully examined and the limits of the tenderness mapped out. The patient should then be turned on the unaffected side, and if in from fifteen minutes to half an hour the tenderness has moved one or two inches, or if at any time the tenderness and rigidity become marked, immediate operation is indicated.

217 N. Washington Street.

Clinical Notes

APPARATUS FOR ADMINISTERING NITROUS OXID AND OXYGEN OR ETHER VAPOR AND AIR IN ANY DEFINITE MIXTURE

THE EXACT PERCENTAGES OF THE TWO GASES BEING UNDER THE IMMEDIATE CONTROL OF THE ANESTHETIST *

J. F. BYINGTON, A.B., M.D.
BATTLE CREEK, MICH.

Hewitt, in the latest edition of his treatise on anesthetics published in 1907, says: "There is no form of anesthesia at present known which is so devoid of danger as that which results from nitrous oxid when administered with a sufficient percentage of oxygen to prevent all asphyxial complications." He came to this conclusion after employing this anesthesia himself 17,000 times without having cause for anxiety in more than two or three cases, "in which, owing to the percentage of oxygen having been insufficient, transient respiratory embarrassment arose, and in one case in which transient syncope, probably of reflex origin, took place." In the same chapter he also says: "The chief objection to the use of definite mixtures of nitrous oxid and oxygen are: (1) that they are difficult to prepare accurately and in sufficient quantities; (2) that different subjects require different percentages, and (3) that the proportion of oxygen can not be increased or decreased to meet the special conditions arising during the administration."

It was this statement which stimulated me to devise an apparatus which will not only provide a sufficient quantity of these gases for a reasonably long anesthesia, but which will also deliver the gases in any desired definite mixture, the percentages of which will at all times be conveniently under the control of the anesthetist.

* Read before the American Academy of Ophthalmology and Oto-Laryngology, Cleveland, Aug. 27-29, 1908.

Hewitt and others have endeavored to accomplish this by employing two rubber bags as reservoirs for the two gases and securing a mixture of the gases by a regulating stop-cock at the outlets of the two bags. The objection to this method is that the two rubber bags must be kept approximately under the same tension of gas, and hence inflated to the same degree; otherwise the gases do not mix accurately.

In place of two rubber bags I employ a pair of small gasometers exactly alike in all dimensions. The gases are conducted from these two gasometers by two flexible tubes of equal dimensions, to the mask, in which there is a regulating stop-cock which delivers the two gases accurately mixed in any required proportion into the mask. The accuracy of this regulating device may

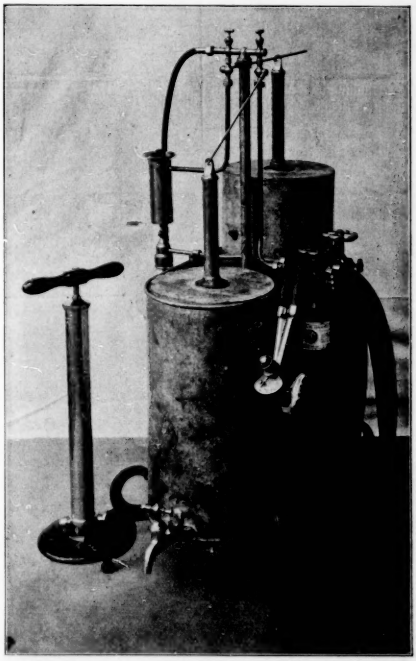


Fig. 1.—Apparatus for administering nitrous oxid and ether or ether and air in definite percentages.

be tested by noting the relative amount of fall of the two tanks during a given time. The apparatus shown in Figure 1 is adapted not only for administering nitrous oxid and oxygen in definite mixtures, but also for administering ether vapor and air in definite percentages.

The two anesthetics may at any time be conveniently changed, the one for the other, without an interruption in the anesthesia. A very convenient procedure, which is also agreeable to the patient, is to start with pure nitrous oxid under which the patient loses consciousness within thirty seconds on the average. As soon as cyanosis makes its appearance a small percentage of oxygen,

2 or 3 per cent., is allowed to mix with the nitrous oxid, and as the anesthesia progresses the oxygen may be increased to 6 or 8 per cent. or sufficient to prevent cyanosis or asphyxia. When the patient is profoundly under the anesthetic the nitrous oxid may be replaced by ether vapor and the oxygen by air. In all these changes the relative percentage of the two gases being used are under the immediate control of the anesthetist, who has merely to change the pointer on the face-mask which indicates the percentage of the two gases.

The water in which the two gas-tanks float is preferably made warm. This warms and moistens the anesthetic vapors prior to their inhalation, which is a great advantage in the administration of ether to prevent the bronchial catarrh and pneumonia which too often follow the administration of this agent by the drop method. The continuous evaporation of the ether has a chilling effect on the vapor, and this can be overcome only by warming the ether vapor rather than the ether fluid. I fill a gasometer with water at 130 F. and this remains sufficiently warm for some hours afterward.

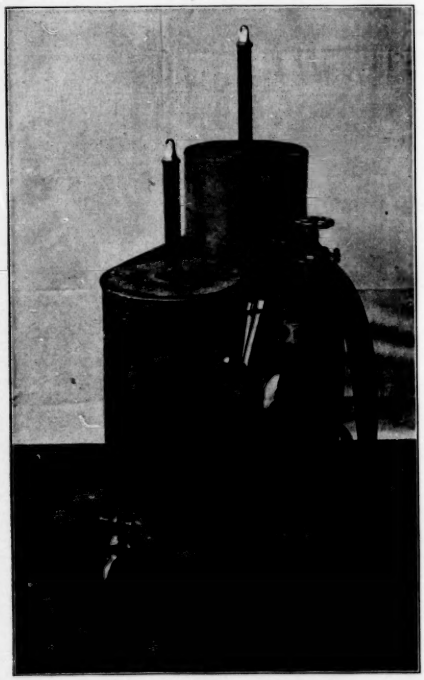


Fig. 2.—Apparatus for administering nitrous oxid and oxygen in definite proportions.

In administering ether, compressed air is used to vaporize the ether for one gasometer and to keep the other gasometer filled with air. The compressed air may be supplied from any of the usual sources. Its entrance to the gas tanks is regulated automatically and it is allowed to enter in sufficient quantities to keep both gasometers filled. The automatic check-valves are regulated by the rise and fall of the gasometers.

A simpler apparatus, Figure 2, has been made without the ether attachment which is used for administering nitrous oxid and oxygen. No compressed air is required for this.

The advantages claimed for the apparatus are the following:

1. It delivers the two gases into the mask with absolute uniformity of pressure and mixed in definite percentages. The accuracy of these percentages can be accurately tested at all times by shutting off the air supply and noting the relative fall in the two gas tanks during a given time.

2. The relative proportion of the two gases is conveniently under the control of the anesthetist, the regulating device being on the mask. The proportion of the two gases can be instantly changed to meet the requirements of the patient.

3. In administering ether, the apparatus requires no attention except the introduction of a fresh supply of ether once in an hour or so. This may be done while the anesthesia is progressing, as the ether botttle can be cut off from communication with the gas tanks by a valve. There is sufficient gas in the tanks to continue the anesthesia until the connection with the ether bottle is restored.

4. Perhaps the greatest advantage of this apparatus over all other forms of anesthetic apparatus which mix gas definitely is the use of warm water in the gasometer tanks, which warms and moistens the gases. This prepares the gases much better for reception by the bronchial tubes. Respiratory spasm is less likely to be excited and the bronchial complications which often follow ether administration are reduced to a minimum.

The new thing in this apparatus is the use of two gasometers with a mixing valve in the mask.

ACCIDENTAL LABORATORY INFECTION WITH DIPHTHERIA BACILLUS

M. L. HOLM, M.D.
Bacteriologist Michigan State Board of Health
LANSING, MICH.

History.—On December 2 I received at the laboratory a very thin homeopathic vial containing a suspected diphtheritic membrane for examination. In attempting to remove the cork the vial was broken and a piece of glass was driven into my left index finger. The wound was allowed to bleed freely for several minutes, then carefully cleansed with a 10 per cent. solution of formalin and closed with celloidin. The wound in the finger showed no sign of infection before the morning of the second day, when a grayish yellow border was observed around the margin. The wound was opened and found to contain several drops of thick grayish brown fluid, which on microscopic examination was found to consist largely of polymorphonuclear leucocytes and some blood. Numerous *B. diphtheriæ* were present, all of which were found inside the leucocytes, there being from two to five such leucocytes to the field, each containing from ten to twenty bacilli.

Treatment.—The wound was again cleansed with 10 per cent. formalin, sealed with celloidin and 1000 units of diphtheria antitoxin were injected into the forearm. Smears and cultures from the wound taken on the following day were sterile and healing occurred in the usual time without further complications.

The membrane submitted was from the pharynx of a child and had been taken on the fourth day of the disease. Smear preparations from the membrane

showed *B. diphtheriæ* in almost pure culture. The organisms were of the barred type, very large, with marked tendency to club formation. Cultures from this membrane on Loeffler serum at 35 degrees C., examined after seven hours, gave the solid type, and after twenty-four hours the usual granular organisms. The direct smears from the infected finger showed small organisms of the solid type. Cultures from the infected finger at 35 degrees C. gave the solid type after seven hours, and after twenty-four hours the usual granular organisms, exactly as did the original membrane. This illustrated beautifully the possibility of morphologic variations in the same strain of organisms when infecting individuals under different conditions.

INSTRUMENT FOR APPROXIMATION OF THE PALATINE PROCESSES IN CASES OF CONGENITAL CLEFT PALATE

L. J. HAMMOND, M.D.
Surgeon, Methodist Episcopal Hospital
PHILADELPHIA

The method advocated by Brophy for bringing the palatine processes in apposition as a preliminary to operative procedure for uniting the soft parts, and so successfully employed by him, has not in my hands been so satisfactory. Even when successful it is so at the expense of a great amount of mutilation of the parts and suffering of the individual. The one other method that has been more generally employed with instances of satisfactory results is that of having the mother encourage the inward growth of the cheeks and, consequently, the palatine processes by firmly compressing the cheeks on either side with the two hands at the same time. This method, of course, can only be successfully employed before ossification has caused fixation.

My repeated failures, therefore, with most of the devices heretofore employed in retaining the palatine processes in position have incited me to devise the comparatively simple instrument shown in the illustration. It is most efficient in all cases in which there is enough of the palatine processes present to be brought together. This can be done at once when the subject is under 5 or 6 months of age. After this period it can be efficiently done by continuously increasing pressure, which should be continued over a period of four or six weeks.

The instrument consists of two lateral plates, semi-oval, so as to conform to the shape of the lateral halves of the superior maxillary bone, fastened together in front by a hinge in order to prevent any play of the lateral half while being introduced. They are brought together by a central right and left screw which is so arranged as to bring together or separate the two lateral plates simultaneously. Sufficient force can be employed by this screw to bring together the palatine processes in any case in which ossification is not a factor; and in cases in which ossification has advanced so far as to prevent immediate approximation, an increased pressure kept up by tightening on the screw will in a short while secure the same result. The fingers alone may be used to tighten the screw, or when the instrument is in position the key which accompanies it can be best employed for this purpose. The two teeth, which are set posteriorly along the inner and upper edge of each lateral plate, are of two-fold value: first, in holding the plates in position by their fixedness in the bony alveolus, and, second, in lessening the injury to the spongy alveolar tissue throughout its entire surface over which the lateral plates are applied. They therefore lessen the general pressure of the entire plate; consequently, what injury the spongy alveolar processes suffer will be mostly at the points where these teeth are fastened.

There is no reason to believe there is any great amount of suffering caused by its use, as its employment, beginning in children as young as 2 days, has not lessened either their general nutrition or development.

1222 Spruce Street.

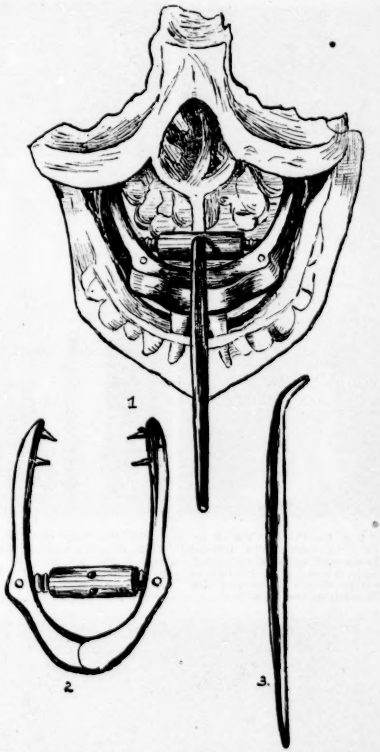


Fig. 1.—Instrument for approximation of the palatine processes in cleft palate in position. Fig. 2.—Instrument partly closed. Fig. 3.—Key.

Specific-Gravity Test for Identification of Criminals.—Debenedetti suggests that important information might be obtained from the individual displacement of water, the special specific gravity, as a means of identifying criminals. He publishes an illustrated communication on the subject in the *Semana Medica*, of Buenos Aires, Dec. 31, 1908, p. 1781. Even if the specific gravity of the arm or leg or head were tested alone, possibly sufficient information might be obtained. The water must be always at the same temperature, for which he suggests 37 C. (98 F.), adding that a little salt in the water brings the specific gravity to that of distilled water at 4 C. He calls the method "hydrostatic anthropometry;" it is not necessary for ordinary criminals, he remarks, but cases may arise in which further means of identification may be useful.

AN UNUSUAL CONGENITAL DEFORMITY

ABSENCE OF BOTH FEMORAL HEADS AND NECKS

JOHN RIDLON, M.D.
CHICAGO

An eminent general surgeon referred a child to me, Nov. 5, 1908, for operation for congenital dislocation of both hips. The patient had been referred to him by an ex-interne of Cook County Hospital practicing in a distant state.

Fig. 1.—Profile view of patient in whom both femoral heads and necks were absent. This is the typical attitude of severe double congenital dislocation of the hips.

Fig. 2.—Rear view of patient, showing rachitic ankles and knees, as well as the prominent hips characteristic of double congenital dislocation hips.

Fig. 3.—Radiograph showing congenital absence of head and neck of both femurs.

The patient was a female child, aged 7½ years. Her attitude in standing and walking was typical of bilateral congenital dislocation of the hips (Figs. 1 and 2). The hips were prominent; the greater trochanters showed with unusual distinctness; there was marked lordosis of the lumbar spine; the child waddled when she walked; the adduction of the legs was limited; the lordosis could be corrected by flexing both thighs to 50 degrees or one thigh to 90 degrees.

The child had rachitic enlargement of the bone ends at the wrists, ankles and knees, and there was a moderate degree of knock-knee. She had pigeon-breast and flaring lower ribs, and the head and face were of rachitic type.

Six weeks before this child (her sixth) was born, the mother had had a severe attack of influenza, followed by a "sore back," and inability to stand straight. The child was nursed for the usual period, had first teeth at the usual time, and walked at fifteen months.

A careful manual examination failed to reveal a femoral head on either side; and because of the rachitic evidences present I believed the case to be one of extreme rachitic bilateral coxa vara. To establish this diagnosis I had an *x*-ray picture made; this showed (Fig. 3) not a coxa vara but a complete absence of the head and neck of the femur on both sides.

GUMMA OF THE PITUITARY BODY

C. E. WOOD, M.D.
Surgeon, U. S. Public Health and Marine-Hospital Service
WASHINGTON, D. C.

Patient.—P. M., an Irishman, aged 37, single, entered hospital in 1908, in an unconscious condition, with a history of having had an apoplectiform attack. It was reported by his friends that he had had syphilis.

Examination.—The patient was a well-developed man with sandy hair and beard, apparently 50 years old. There was ptosis of the left upper eyelid. His face was pale; his lips very pale. There were sordes on the teeth and lips; the tongue was moist, swollen and coated. The pupils reacted to light. The thorax was deep and well muscled. There were a few diffuse, moist, large and small râles. The abdomen was apparently normal. The skin was cold and moist. The patellar reflexes, when first examined by an interne, were reported as normal or slightly increased, but were not elicited at any subsequent examination. The pulse was 80, weak and of low tension; the respiration 22; and the temperature 36.8 C. It was not possible to get an area of absolute dulness in the cardiac region with the patient in a recumbent posture. The apex beat was not seen. The heart sounds were pure and distinct, but weak. The urine showed a trace of albumin and hyaline casts.

Course of Disease.—Strychnin sulphate was ordered to be given hypodermically. On the second day, ophthalmoscopic examination showed papillitis of the left optic nerve. It was not possible to see the right nerve-head, as the right eye continually followed the reflection of the light; but there was a rather pale appearance of the retina. The nurse reported involuntary evacuation of the bladder and bowels. There was a small hyperemic area on the inner aspect of the left ankle, as of incipient decubitus. The strychnin was continued; potassium iodid was ordered, 30 grains, three times a day, increasing 5 grains daily, and inunctions of mercury were instituted, to be used daily. The patient was able to swallow in the forenoon, and soft diet was ordered. On the third day, the patient was found to be very weak; his temperature was 38.4 C.; his pulse could barely be felt at the wrist. There was a slight cough and relative dulness of the right lower lobe. Treatment was continued as before, with the addition of continuous irrigation of the colon with hot normal salt solution. On the fourth day, the pulse was 104, the respiration 28, and the temperature 36.6 (fall by crisis). The irrigation was discontinued. The patient spoke for the first time, and protruded his tongue when told to do so, leaving it out indefinitely unless told to put it back in his mouth. There seemed

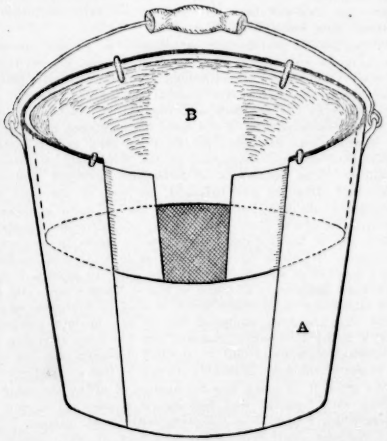
to be an aphasia present, particularly for proper names. The patient was disoriented and had a condition of pseudoparalysis. He could apparently make any movement, but made very few. The muscles were firm and moderately well developed. There was no sign of any focal lesion, except ptosis of the right upper lid and papillitis. The patient continued in the same condition until the night of the thirteenth day, when his temperature rose to 39.4, his breathing became rapid, and there was a slight cough. The patient died at 2 a. m. on the fourteenth day after his admission.

Autopsy.—The pathologic findings confirmed the clinical diagnosis of syphilis, gumma of the brain, chronic interstitial nephritis, nutmeg liver, general arteriosclerosis and pneumonia, and also showed the existence of cirrhosis of the liver. The skull was slightly adherent to the dura; the Pacchionian depressions were marked. There was considerable subarachnoidal fluid, especially about the base of the brain. There was a gumma about the size of a horse-chestnut just posterior to the optic commissure, lying in the sella turcica. The optic tracts posterior to the commissure were involved. There was no involvement of the fourth nerve trunks.

SIEVING PAIL FOR LAVAGE WATER

ANTHONY BASSLER, M.D.
NEW YORK CITY.

The object of this pail is to strain out from wash-water returning from the stomach, substances which would be of clinical value in the diagnosis and therapeutics of gastric disorders.



Sieving pail for lavage water. A, pail; B, sieve; front of both laid open.

The apparatus is simple, consisting merely of an ordinary enameled ware ten-liter pail, into which is fitted a straining-can which is made to set snugly into the upper part of the inside of the pail. The can is made of sheet brass, and above are four hooks to keep it in place. The floor of it consists of a brass wire mesh of sixty wires to the inch. This screen stretches across the pail at about one-third the distance down from the rim, and is of strong texture so that it will stand handling and wear without breakage. At the end of the washing, the straining sieve is taken out for examination, the clear water being left below in the pail.

Special Article

IMPRESSIONS OF PARIS *

WILLIAM OSLER, M.D.
Regius Professor of Medicine, Oxford University; Honorary Professor of Medicine, Johns Hopkins University
OXFORD, ENGLAND

I. TEACHERS AND STUDENTS

THE REVERENCE OF THE FRENCH FOR GREAT MEN—TOUSSAINT—THE MEDICAL SCHOOL—THE STUDENTS—THE CLINICS

PARIS, Jan. 15, 1909.

THE REVERENCE OF THE FRENCH FOR GREAT MEN

After a stay of three and a half months, I am leaving Paris with many regrets. I am sorry not to be a member of the Faculty of Medicine; I should be glad to put after my name *Médecin des Hôpitaux*; the position of *chef de clinique* at the Hôtel-Dieu with Professor Dieulafoy would suit me admirably; I could be quite happy as an interne with Professor Raymond at the Salpêtrière, or as an externe with Professor Pierre Marie at the Bicêtre or even as a *stagiaire* at the Cochin with Dr. Chauffard! Best of all, I should like to be a P.C.N. at the Jardin des Plantes, a student who is working at physics, chemistry and natural history in the year preliminary to medicine. I should like to do the *vice versa* trick of Anstey's story, and change places with the young P.C.N. in this year's class who will go through the grades of my regrets just mentioned and who about the year 1940 will become dean of this ancient and remarkable medical school.

It would be pleasant to see the superstructure which the next two generations will build on the scientific foundations of the nineteenth century—but these are fancies, not impressions, and it is the latter which I wish to give to my brethren on the other side of the Atlantic, impressions of a long-desired medical holiday among some of the older universities of Europe. Asked the strongest single impression made on me here, I should reply: "The extraordinary reverence of the French." The streets, the squares, the churches, the public buildings, the schools, all tell the same story; the books repeat it, the newspapers echo it, and with it the lecture rooms resound—reverence for the great men of the past. The Pantheon, with its inscription, *Aux Grandes Hommes La Patrie Reconnaissante*, is but a great expression in stone of this universal sentiment. The history of science is writ large in the city; in monuments, in buildings dedicated to the illustrious dead and in streets called by their names. There are more statues to medical men in Paris than in Great Britain and the United States put together; many of the hospitals are called after the men who have shed glory on France—Bichat, Laennec, Broussais, Trousseau and Claude Bernard—and in the hospitals themselves each ward is dedicated to the memory of some distinguished man. Every Frenchman is a hero worshiper, and has a master, dead or alive, whom he adores. Among the men of this generation you can tell very quickly who have been under Claude Bernard or Trousseau or Charcot or Potain. The lecture, the clinic, the casual conversation, is almost certain to bring in a reference to "my honored master"; and this delightful feature is seen in all circles. Even in the salon-catalogues, after the name of the painter of a picture is put the name of his master.

But to realize what the sentiment means to Frenchmen, one must be in Paris on All Saints Day—Toussaint—the fête of the eternal absent, which is kept in a way that appeals with extraordinary sympathy to the heart of one who believes in the immanence of the mighty dead "who live again in minds made better by their presence." During the last week of October the streets begin to tell of the great festival. In stalls along the boulevards, in temporary markets, in the ordinary flower-shops there is a rich display of decorations—crowns, crosses, stars in fresh flowers, or leaves, with which to decorate the graves. November 1 fell on a Sunday.

* EDITOR'S NOTE:—This is the first of a series of travel notes by Prof. Osler, who is on a year's leave of absence from his duties at Oxford.

Though a stranger within the gates, I had a little pilgrimage of my own to make on Saturday afternoon to the cemetery of Montparnasse. The main avenue leading to it was an open flower-market, and for three or four hundred yards the cemetery wall was lined with booths for the sale of every sort of emblem and of fresh and dried flowers. Through the "Gates of Grief" a steady stream of people poured, each one bearing some tribute to the memory of a loved one. I stood for several minutes just inside, watching the procession. A group of young schoolgirls passed, each one bearing a bunch of chrysanthemums to lay on the tomb of a fellow pupil or of a loved teacher; close at hand were two Sisters of Mercy arranging wreaths on a vault that looked one of the oldest in the cemetery—perhaps the annual devotion of the guild to a loved member. A little laddie of eight hurried by with a bunch of violets in his hand, running with the ease of one who knew his road. A young mother in deep mourning with a baby in her arms, an aged couple arm in arm, each with a little basket of flowers, two young students, a little old lady with her daughter followed by a footman carrying large wreaths, workmen in rough clothes, soldiers, sailors—a motley group, a touching sight, but on the whole not a sad one. Here and there we could see the stricken heart in the pale set features, but the general impression was one of a cheerful festival, and the glorious sunshine, the bright flowers and the merry voices of the children helped to dispel the gloom of the city of the dead.

Then I turned and sought the tomb of a man whom my teachers taught me to honor. In Odessa a young Frenchman met with an experience which has happened to every thoughtful physician. An epidemic of diphtheria with its awful mortality struck the terror of helplessness and hopelessness into his heart, and he decided to return to Paris, again to take up the student life and to endeavor to know more of disease before he undertook its treatment. An old friend at the Charité Hospital gave him the opportunity he sought, and for years he worked quietly at the problems of disease. With the publication of his books on typhoid fever and on tuberculosis, Louis found himself famous, and he ranks to-day among the great French physicians who laid the foundation of modern clinical medicine.

My old teacher, Palmer Howard, a man of the same type, taught me to reverence his memory, but my pilgrimage had another inspiration—gratitude to the devoted teacher and friend of the veterans whom I loved in the profession in the United States—W. W. Gerhard, Oliver Wendell Holmes, Henry I. Bowditch, George C. Shattuck and Alfred Stillé. But as I laid my wreath in front of the grille of the tomb it was not of these men I thought, but of young James Jackson whom Louis loved as a son and who was stricken at the very outset of a brilliant career, and whose memoir by his father should be in all medical libraries, as the story of his life is an inspiration to young men. And to Louis himself came a similar tragedy. Inside the tomb is a slab of marble to the memory of his only son, a medical student who died of tuberculosis in his eighteenth year. At dinner one evening Dr. Bucquoy, President of the Academy of Medicine, who was Louis' last interne told me the story of the illness—a sudden hemoptysis and then a long lingering progress to the grave!

To the famous cemetery of Père Lachaise all Paris flocks on Toussaint and the following day. Hundreds of thousands visit the tombs of the great men who lie there, and the place is literally strewn with flowers. We went on both days, as it takes time to see the tombs and to find those of interest. Here I had a special mission, to see the tomb of that rare genius, Bichat, who started a revolution in medicine before he was 30, and who died at 32, leaving a name which is reverenced throughout the world. It was good to see that his simple grave was not neglected—a wreath, fresh flowers, and several plants showed that his memory was still cherished, and I added a bunch of pansies "for thoughts."

Toussaint gives an indication of the spirit which makes France great. Present in the daily life and everywhere in evidence it breaks out into this magnificent demonstration of loyalty to the family and of reverence to the *men* who have helped the nation and the race. To the cold-blooded Anglo-Saxon this festival of the dead is a revelation, which he can not witness without profound emotion and without a regret that England and America miss in great part the moral and intellectual inspiration associated with such celebrations. France sings one song: "Glory to Man in the highest! for Man is the Master of things," with which words Swinburne (who has been of all modern Englishmen the most sympathetic interpreter of the French) ends his famous "Hymn of Man."

In the medical world of Paris at a first glance the men only are recognizable; everything else is different, and so very different! But here is the charm; and it does one good to get into an atmosphere charged with novelty, where the burning questions are for a time unintelligible. There are four factors of the first importance—the medical school, the hospitals, the medical societies and the Pasteur Institute.

THE MEDICAL SCHOOL

There are thirty-seven professors and forty-three *agrégés* or assistant professors, to which must be added scores of assistants and demonstrators in the different laboratories. The faculty chooses its dean (at present Dr. Landouzy, the distinguished physician) and its own members, with the supervision of the Superior Council and the Minister of Education. It is not often, I believe, that the choice of the faculty is overridden. A man who reaches the dignity of a professorship in the faculty is pretty certain to have earned the distinction thoroughly, and the present occupants of the chairs are men widely known in their different branches. Much of the work is done by the *agrégés*, but in nearly all cases the professors themselves are very hard-working men. At the medical school are the dissecting-rooms and the laboratories, the equipment of which appears to be excellent. For a large school one can not but feel that the separate unit—the institute—is a more satisfactory plan.

There are no professional pathologists in France—the men in charge of the laboratories of pathology and general therapeutics (Bouchard) of pathologic anatomy (Pierre Marie) and comparative and experimental pathology (Roger) are physicians to the hospitals and engaged in practice. Cornil, who died recently, one of the most distinguished pathologists in Europe, was physician to the Hôtel-Dieu and a senator. Specialists are not recognized in the wide field of internal medicine. The professors of *pathologie médicale* (internal medicine), Déjerine and Brissaud, are two of the most distinguished of living neurologists. But a more remarkable illustration of the absence of a group of professional pathologists was in the appointment of Pierre Marie to be Cornil's successor. It would be very much as if Allan Star or Dana were selected as successor to Prudden. But in practice it does not work badly—not at least in Pierre Marie's case. He has the laboratory in excellent order, a staff of first-class assistants who are fully equipped for all the modern problems; and a young Edinburgh graduate who has been attending the laboratory demonstrations in morbid anatomy tells me that it is one of the most profitable courses he has ever followed.

An attempt to break this old system of filling the scientific chairs with hospital men has led to a pretty row—one of three which I have been following with great interest. When the anatomy chair fell vacant last year, it was thought of course that the usual plan would be followed; and among the local candidates a very well-known man, an assistant of the former professor and a surgeon to the hospital, expected the position. But a new departure was made. Professor Nicolas, a professional anatomist, was brought from Nancy, and he has rearranged the dissecting-room; in fact, has taken charge of it himself. The students raised a great row last year and the dissecting-rooms had to be closed. With the opening of the course in November, the troubles began again, and it was impossible for Professor Nicolas to lecture. The amphitheater was a mob of howling students, who would not listen to him. Day after day the disturbance continued, but toward the middle of December, just as matters had begun to settle, a second row began, of which I shall speak in a few moments, and this stirred up the first and second year students, and as a result of a final riot, the Minister of Edu-

cation closed the school for students of these years until the first of March.

There has been a good deal of personal animus in this affair. Naturally, Professor Nicolas and his assistants have not been very acceptable to the many friends of the other candidates. Scarcity of material and new arrangements about the number of men dissecting on a body, have been among the grievances; but the total number of bodies handed over to the school is enormous—in 1907, 1,958 to the medical school proper and 724 to Clamart, a separate dissecting-room for the externes and internes. With the opening of the semester peace seems in sight, and the Minister of Education has forgiven the students and reopened the school.

The *agrégés* form a body of men analogous to the assistant or associate professors in American schools and to the privat-docents and professors extraordinary in Germany, only here they are paid officers of the school, help the professors in teaching and in the examinations, and from this body the professorate is recruited. Every young doctor in Paris, at some time of his life, hopes to become an *agrégé*. The positions are given after examination (*concours*) by a jury selected from the faculties of medicine of France. So many vacancies occur each year in all the schools. The appointment is for nine years.

This year a new regulation came into force and led to a revolt and then a riot. A preliminary examination was instituted to select those who were eligible to compete at the *concours*. As a kind of certificated examination this was opposed by the Congress of Practitioners as creating a sort of special diploma. But the chief opposition came from the candidates and their friends, as the subjects of examinations were to be of an elementary character—anatomy and physiology—so as to insure that all candidates kept up their knowledge of these branches. As most of the men applying for *agrégé* professorships are at least 35 years of age, and have long been engaged in special work, they not unnaturally raised a protest against an examination on subjects with which they had, so to speak, long since finished.

The examination was fixed for Monday, December 21. There were 148 candidates for ten or twelve places. The jury was composed of nine members, chosen from the different faculties of France under the presidency of Professor Bouchard, who is regarded as responsible, in great measure, for the new regulations. There were rumors of a great row, so I went early, armed with a note, which admitted me to the school. By noon the street outside was a surging crowd and only the candidates were admitted through the gate into the quadrangle; but a sudden rush carried the guards, and about two hundred and fifty got inside. About fifty policemen had been stationed in the quadrangle, and they endeavored to put out the students who had come in with the candidates. There were a good many scuffles and a few were roughly handled. Groups of the candidates protested against the invasion of the school by the police.

By 1 p. m. the tumult inside and out had become so serious that Professor Bouchard asked to have the Republican Guards (soldiers) called out, and they soon cleared the quadrangle. Meanwhile, Prof. Pierre Marie and one or two members of the jury had got the candidates into the hall, and at 1:30 the greater part of them filed into the small amphitheater, I bringing up the rear, regarded, I could see by glances of some of the men, as an ancient candidate from the University of *Weissnichtwo*. Inside the babel was more intense than ever; the men protested against the new arrangements as preposterous and declared they would have nothing to do with the *concours*. In a few minutes the members of the jury came in and took their places, greeted by jeers and shouts. Members of the guard were called in and lined the steps of the amphitheater, and this still further aggravated the row. The men refused to inscribe their names and the jury retired. The riot excited the entire university and the whole town, as the protest was not by students, but by men of advanced standing, many of them well-known by their researches and publications.

The next day the jury announced that the *concours* would be held on the 24th at 7:30 a. m. By 6 a. m. the police had possession of all the streets leading to the medical school, and only those were allowed to pass who had certificates. One hundred and thirty-eight candidates were present, of whom ninety-seven refused to take part. The questions, set for the written paper, were: (1) The intestinal mucosa and its functions; (2) the secretion and excretion of the bile; (3) the mammary gland and its functions. The men who abstained sent a respectful protest to the jury, saying that the questions were of a too general character for the men who had long since specialized in various directions, and that they also felt that the interference of the police and soldiers was an insult to the profession. As they remarked very properly, they were already men of experience, some of them had gray hairs, many had contributed to advance the science and art of medicine, others were physicians and surgeons to the hospitals, men with established positions in the community.

Meanwhile, outside the faculty buildings, the medical students had taken up the quarrel, and throughout the day a series of conflicts took place. A good many windows were broken, a few students were hurt, and the police had to stand a good deal of rough treatment. Fortunately, the Christmas vacation brought peace. The new regulation was again discussed by the faculty and the superior council, and as a result of the numerous protests the Minister of Education has announced its revocation.

A faculty without its troubles is always in a bad way—the waters should be stirred. Some ferment should be brewing; the young men should always be asking for improvements, to which the old men will object. It is a sign of health, and so we may regard these troubles at the Paris medical school—much good will come of them. Not that the problem of the appointment of professors will ever be solved. The *concours* seems an admirable plan for the *agrégé*, though it is much criticized, and many here are in favor of a less didactic test—of some plan whereby a man's work will tell. The difficulty would be to eliminate favoritism and to get a perfectly impartial jury. The positions are so few (only about ten this year), and the candidates so numerous.

There is growing up a feeling in favor of the German plan of privat-docents; of recognized extra-mural teachers as in Scotland, but the traditions are strongly for the *concours*, which they say, with all its defects, brings out the strong men and is an immense stimulus. Moreover, it is the continuation of a long series of *concours* through which the good men pass the various grades of externe, interne, *chef de clinique* and *chef de laboratoire*, and physician or surgeon to the hospitals. It would be difficult to give it up without wrecking the whole system which for a hundred years has been the distinctive feature of French medicine. It fosters, too, that precious quality of clear and logical expression in which our French brethren excel; for in the final examination at the *concours* the candidate in medicine has to hold a clinic and has to lecture for an hour on some subject after forty-eight hours of preparation. The man with a glib tongue has a great advantage, and yet as we all know he is not always the best man, and it would seem desirable in some way to recognize the scientific contribution of the candidates.

(*To be continued*)

Therapeutics

SPECIFIC URETHRITIS

Dr. James Pedersen, New York (*New York Medical Journal*, Jan. 23, 1909), discusses the treatment of acute gonococcic urethritis in the male. He emphasizes the well-acknowledged fact that there is no "best" treatment for this inflammation; in other words, there is no treatment that is the best for all patients.

While, theoretically, the most sensible treatment would be to place a patient with specific urethritis in bed, on a milk diet combined with bland alkaline drinks and free catharsis, it is obviously impossible, in the majority of instances, to carry out such treatment.

Consequently it should be aimed to get as near as possible to such general treatment; in other words, the patient, besides what medication he may receive, should be told to walk as little as possible, lie down as much as possible, eat a bland, non-irritating diet, which means abstaining absolutely from alcohol, tobacco, coffee, tea, fried stuffs, much meat, spiced foods or condiments. The patient should drink freely of water or alkaline water, as vichy. He should also wear a suspensory bandage, and should be instructed in the most perfect cleanliness by the physician.

The aim of medication should be, as stated by Pedersen:

1. To influence the volume and reaction of the urine.
2. To render the urine more or less antiseptic.
3. To charge the urine with a medicament in solution which shall act on the inflamed mucous membrane.

The first indication is met by the administration of alkalies to the amount of rendering the urine alkaline, or by the administration of sodium salicylate, salol (phenylis salicylas) or saccharin to render the urine acid, if that is desired.

To meet the second indication there are no better drugs than salol (phenylis salicylas) or hexamethylenamin (urotropin), although drugs that meet the third indication also have some antiseptic properties.

The drugs to meet the third indication are copaiba, santal wood and cubebs, and of the many balsams and genitourinary stimulants offered none are better than these drugs. The oil of santal is the best and fills every indication that any of the other balsams can fill, and with less irritation to the stomach or disturbance of digestion.

Whether the urine should be rendered alkaline or kept acid in gonorrhea is a subject of dispute, some authorities believing that alkalinity of the urine inhibits the growth of the gonococcus in the posterior urethra, while others contend that when the urine is acid the gonococcus will not invade the walls of the bladder. It seems certain, however, that if, in the beginning of the inflammation of acute gonorrhea, there is increased frequency of urine and burning, with marked ardor, that something must be done in the way of palliation, and, exclusive of hot sitz baths, absolute rest and a milk diet, nothing lessens this symptom so much as do the alkalies. Also, as pointed out by Pedersen, no great inhibition of the gonococcus will be caused by any medicament taken by the mouth and excreted by the urine; consequently, any germicidal treatment should be aimed at the infection in the anterior urethra before it has reached the posterior urethra or bladder. Therefore, any treatment that renders the urine alkaline during the first stage of acute urethritis, such as the reduction of the amount of meat ingested, the drinking of plenty of vichy, and the administration of an alkali, is of advantage in gonorrhea.

The best alkalies to administer are potassium acetate, potassium bicarbonate and potassium citrate. There is no special advantage of any one over the other two. The acetate is slightly more actively alkaline, the bicarbonate the most disagreeable to take and the citrate the pleasantest. This may be given as:

R.	gm. or c.c.		
Potassii citratis	40	or	3ix
Aquæ	200		fl.℥vi

M. et sig.: Two teaspoonfuls, in water, three times a day, after meals and at bedtime. The same dose may be administered more frequently, if deemed advisable.

As soon as the first acute symptoms are over, the alkali should be stopped, as it is not well for a healthy condition of the mucous membrane of the bladder to keep the urine alkaline for any considerable time. At this time it seems well to begin the administration of salol or urotropin (hexamethylenamin), as thought best. If there is any irritation of the kidneys, salol, on account of one of its decomposition products being phenol, should not be used, phenol being irritant to the kidneys. If it is administered, it is well given as follows:

R.	gm.		
Phenylis salicylatis	5	or	gr.lxxv

Fac capsulas siccas, 20.

Sig.: A capsule every four hours.

As pointed out by Pedersen, as soon as posterior urethritis has developed, which occurs in the majority of cases of gonorrheal urethritis, one of the balsams is indicated, unless there is vesical irritation, as shown by great frequency of urination with small amounts of urine passed. For the reasons above stated santal oil seems to be one of the best treatments and may be administered as follows:

R. Capsulas olei santali flexibiles, āā.....m. x
No. 25.

Sig.: A capsule three times a day, after meals.

If there is no diminution in the amount of pus in the second glass of the two-glass test, and there are no symptoms of over-action of santal wood (viz., no pains referred to the ureters, or lumbar pains, and no special indigestion), two of these capsules three times a day may be taken.

It should be emphasized that no patient with gonorrhea can be well treated unless at each office visit he passes urine, that has been retained for at least three hours, into two glasses, he dividing the amount as nearly equally as his judgment permits. The washout from the urethra can thus be examined in the first glass, and the urine from the bladder and posterior urethra be examined in the second glass, and the conclusions thus arrived at will many times decide the treatment that is needed.

All balsam treatment may be stopped as soon as the posterior urethritis is cured. If, on the other hand, the posterior urethritis does not improve, the balsam may be increased in amount, or, if the posterior urethritis tends to become chronic, local posterior urethral treatment is indicated. It is also wise to demonstrate to the patient that, although the anterior urethral discharge may have ceased, he is not well until the posterior urethra is healed.

If it is preferred to use urotropin (hexamethylenamin) as a bladder and posterior urethra germicide treatment (and if the bladder becomes actually infected there probably is no better treatment), it may be given as follows.

R.	gm.		
Hexamethylenaminæ	1	or	3iss

Fac chartulas, 20.

Sig.: A powder, in a glass of water, four times a day.

Pedersen treats the anterior urethritis, which is the starting point of the gonorrhea, with injections of organic silver compounds, and believes that if there has not been a previous infection, and if the tissues are healthy, the gonococci may be caused to disappear from the discharge within a few days, even within forty-eight hours. While it may not be often possible actually to abort acute gonorrheal urethritis by this

method, he believes that the first stage can be greatly shortened.

The silver compounds that may be used for this purpose are albargin, argonin, argyrol, novargon and protargol. The strength of the solution used is generally, at first, 1 per cent., which may be increased later, after the urethra becomes less sensitive, to 2 per cent. Pedersen injects a urethral syringeful into the anterior urethra, and has the solution retained from five to ten minutes, in the incipient stage of the disease.

The patient, of course, should be carefully instructed first how to pass the urine and then how to use the syringe and how to retain the fluid. The length of time that he should retain it depends on the length of time that there is burning after the injection has been evacuated. If the burning lasts a considerable time, the injection should be retained a shorter time. Unless there is a contraindication of much pain and burning, the retention of the silver solution for five minutes, and perhaps longer, is certainly more likely to allow the germicide to penetrate more deeply into the pockets of the urethral folds and kill the gonococci which are there hidden.

Pedersen advises the use of this injection "every three hours for the first twenty-four hours, and every four hours thereafter." Every fourth day he examines a smear of the discharge to see if gonococci are still present. As they diminish in number the strength of the fluid is reduced and the frequency of its injection is diminished from four times daily to only twice daily.

"After the gonococci have been absent from the discharge for from three to seven days (depending on the severity of the infection in the given patient) the injection is reduced to once a day, and from five to ten days later (again depending on the patient) it is discontinued altogether."

This frequent injection of the urethra would seem a little strenuous for the patient, and might need to be modified if it had caused much swelling and inflammation. Pedersen does not speak of hot sitz baths if much inflammation or irritation is present. They are certainly of great advantage.

He does not believe that irrigation is often indicated in anterior urethritis, and we can but agree with him that there are only "two indications that justify instrumentation of an acutely inflamed urethra, viz.: retention of urine not yielding to all the lesser means for its relief, and extremely severe posterior urethritis." It is certainly not justifiable to give any great pressure to the delicate urethral membrane by any irrigation method. Such irrigations may not only force the gonococci into deeper tissues as well as into the posterior urethra and perhaps bladder, but may so injure the mucous membrane as to cause long protracted chronic inflammation and strictures.

As soon as the gonococci have disappeared and been absent for several days a continued catarrh of the anterior urethra is best treated by astringents, and there is probably none better than the generally used zinc sulphate. Pedersen uses this salt in solution "up to two grains to the ounce" (.4%), and advises injection twice daily, rarely three times daily, and then he gradually reduces the frequency. While zinc sulphate is often combined with several other ingredients for injection, such as fluid hydrastis, boric acid, etc., it probably acts as well in simple solution, as follows:

R.	gm. or c.c.	
Zinci sulphatis	50	or gr. x
Aquæ	100	fl.℥iv

M. et sig.: Use externally as directed.

This subacute stage of gonorrhea should cease in about two weeks, and if it persists longer it seems probable that there is some complication of a previous inflammation or a localization that should be definitely treated. If at any time during this subacute stage the secretion shows gonococci, Pedersen again uses the silver albuminoid injection. During this stage the same restricted diet should be continued, but more exercise may be allowed.

If posterior or anterior urethritis persists with gonococci absent after the period of subacute inflammation has passed, Pedersen advises the use of nitrate of silver solutions. The whole length of the anterior urethra may be treated through an endoscope by means of a cotton swab medicated with 0.5 or 1 per cent. nitrate of silver solution; or there may be instilled by means of a deep urethral syringe a syringeful of a "1 to 5,000 to 1 to 250" solution of nitrate of silver, or a few drops of a 0.25 to 0.5 per cent. solution. Such treatment should not be repeated oftener than once in five days, and Pedersen says once in seven days may be a safer average. The passing of all instruments through the urethra, even in this late stage of gonorrhea, should be done with the greatest of care, and thin, bland oils are the best lubricants.

If the morning drop persists Pedersen believes that follicular urethritis is probably present, and thinks that irrigations are then advisable, as if solutions pass from the anterior urethra back into the bladder they cleanse the mouths of the follicles which are directed forward, and the retained secretions are thus removed. He would use for this purpose a solution of 1 to 30,000 of bichlorid of mercury or a saturated solution of boric acid, or a 1 to 2,000 potassium permanganate solution. The solution selected would be given by the ordinary irrigation apparatus, viz., a short glass urethral tube and the pressure necessary to cause the solutions to flow gently into the bladder.

If there is great disturbance from the posterior urethritis, Pedersen would put the patient to bed, and believes that the excuse may be present, even in the acute stage of gonorrheal urethritis, for first washing the anterior urethra with boric acid solution and then anesthetizing the mucous membrane with a 2 per cent. solution of eucain and passing a soft rubber catheter, 14 to 16 French, into the deep urethra, and then instilling into the deep urethra two or three fluidrams (from 10 to 15 c.c.) of a silver albuminoid solution, or a solution of nitrate of silver in strength of 1 to 5,000 to 1 to 1,000. He finds one such instillation may greatly relieve the patient of his distressing symptoms. This treatment may be repeated in a day or two, if it prove to be necessary.

It should not be forgotten that these apparently severe symptoms of a posterior urethritis may really be a prostatitis, or even the beginning of a prostatic abscess.

A posterior urethritis pure and simple in the acute stage of gonorrheal arthritis will rarely need irrigation treatment. As a general rule, it will be found that hot baths, absolute rest, a milk diet and the administration of alkalies will within twenty-four hours stop the intensity of the symptoms.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

103 DEARBORN AVENUE . . . CHICAGO, ILL.

Cable Address . . . . "Medic, Chicago"

Subscription price . . . . . Five dollars per annum in advance

For other information see second page following reading matter

SATURDAY, FEBRUARY 27, 1909

THE INTRAVENTRICULAR INJECTION OF MENINGOCOCCUS SERUM

During the past year the results from the use of Flexner's serum in the United States and Great Britain have been most gratifying. The percentage mortality figures of former years now represent the recoveries. In Germany Kolle and Wassermann[1] and Jochmann[2] have been using a similar serum but without any such success, since the secret of the successes with Flexner's serum lies in the mode of application.

Flexner[3] has shown that the serum must reach the causal micro-organism in a certain degree of concentration, and this it is impossible to obtain by subcutaneous injection; it must be injected directly into the subarachnoid space. The bactericidal power of the serum in the proper strength can be demonstrated in test-tube experiments. It must be admitted, however, that clinical observers have attested an antitoxic[4] property which, it has been suggested, may be taken advantage of by the subcutaneous application. Some believe that a combination of the two methods of injection is indicated—the subcutaneous serum to neutralize the endotoxin liberated by the action of the intraspinal serum on the meningococci.

Recently attention[5] has been drawn to the fact that the lateral ventricles of the brain may serve as a habitat in which the organisms persist and develop after they have died out in the spinal subarachnoid space. Here, out of reach of the serum injected intraspinally, they may continue to exist and be a constant menace, accounting perhaps for relapses; moreover, such intraventricular bacteria may cause inflammation leading to hydrocephalus and death. Evidence of such an associated inflammatory process in the ventricles in cases of meningitis was long ago[6] demonstrated at the autopsy table in the dilated ventricles and the well-marked granulation and thickening of the ependymal lining. Indeed, the condition of pyohydrops ventriculorum was found postmortem as early as 1805.[7]

Although the method of puncture of the lateral ventricles and withdrawal of fluid has been used in hydrocephalus, it is only recently that the introduction of a foreign serum into the ventricles has been attempted. The way has been pointed out to this third mode of application of the specific antimeningitis serum. In a report[8] of its use in a case in which the meningococci abounded in the ventricular fluid after the spinal fluid had become sterile, the advisability of performing ventricular puncture in the acute stages of persistent and relapsing cases is emphasized. If meningococci are found in the fluid withdrawn, the administration of serum, under proper precautions, directly into the ventricles is indicated. In this way it may be possible to avoid hydrocephalus and still further to reduce a mortality already remarkably lowered by the use of meningococcus serum.

1. Kolle and Wassermann: Deutsch. med. Wchnschr., 1906, xxxii, 16.
2. Jochmann: Deutsch. med. Wchnschr., 1906, xxxii, 20. Schöne: Therap. d. Gegenw., 1907, xlviii, 52.
3. Flexner, S., and Jobling, J. W.: Jour. Exper. Med., 1908, x, 141.
4. Ladd, L. W.: THE JOURNAL A. M. A., Oct. 17, 1908, li, 1315. Sladen, F. J.: THE JOURNAL A. M. A., Oct. 17, 1908, li, 1318; Old Dominion Jour. of Med. and Surg., 1908, No. 7, 241.
5. Knox, J. H. M., and Sladen, F. J.: Arch. Pediat., 1908, xxv, 761.
6. Ziemssen: Handbuch der acuten Krankheiten, 1876, p. 683. Hulsman: Inaug. Diss., Kiel, 1889. Councilman, Mallory and Wright: Epidemic Cerebrospinal Meningitis, Boston, 1898.
7. Joslin: Am. Jour. Med. Sc., 1900, cxx, 444.
8. Cushing, H. W., and Sladen, F. J.: Jour. Exper. Med., 1908, x, 548.

THE HOUSING PROBLEM

The serious student of social conditions will undoubtedly find for many moral economic and physical ills a common cause—the vicious method of housing the multitudes in our great cities. Self-respect decays where facilities for cleanliness are denied and where a decent privacy is impossible; the instinct of thrift is nipped in the bud by surroundings in which self-improvement seems impossible; and morals, finances and health suffer together in disease-breeding dwellings. Such conclusions have been forced on students in Washington—a city with few manufacturing or commercial interests and with few streets which suggest extreme poverty by their exterior. There was a time when Connecticut Avenue, ignorant of the existence of Willow-tree alley, used to boast that Washington had no slums. As a matter of fact, many blocks in respectable and even well-to-do neighborhoods of Washington are honeycombed by alleys swarming with an obscure population. The conditions revealed by the Washington Civic Center through the work of its Committee on Housing the People, and recorded by Dr. George M. Kober,[1] were disgraceful.

Similar investigations elsewhere have shown the existence of equally baneful overcrowding in other cities. This is an entirely logical result of the indifference of the more enlightened half of the world to the privations of the other half; and when Nemesis, in the form of tuberculosis, scarlet fever, and many another dread disease, issues from the tenement the careless dweller on the boulevards has small right to complain of the "mysterious dispensations of Providence." So long as greed and shortsightedness continue business partners, and

1. The History and Development of the Housing Movement in the City of Washington, D. C.

the firm is allowed to operate unchecked, so long will congestion and disregard of sanitation continue to breed crime, immorality and disease; but to say this is neither, on the one hand, to excuse the community which tolerates such conditions, nor, on the other, to point out a practical solution of the problem.

Everyone who has given any attention to the tenement-house question knows that the worst plague spots in great cities yield most exorbitant profits to the owners; but it is perhaps not so well known that comfortable, sanitary dwellings, suited to the needs of city wage-earners, can be built to offer at a moderate rental, which will yet yield a reasonable profit to an investor. The problem, then, has two aspects: one, to prohibit—or, what amounts to the same thing, to render unprofitable — the insanitary tenement; the other, to demonstrate the practicability of the model tenement as a business proposition. To meet the first phase of the question it has been proposed to gauge the value of tenement-house property in condemnation proceedings, not by the rents derived from it, but by its sanitary condition. Various successful efforts have been made to show the desirability of sanitary tenements as an investment. Dr. Kober, in the work previously referred to, describes the movement for the erection of model tenements undertaken by the Washington Sanitary Improvement Company under the leadership of Surgeon-General Sternberg, which has proved the possibility of providing sanitary dwellings, at a low rental, but still yielding 4 per cent. on the investment. This example deserves to be extensively imitated. It is to be hoped that some day the competition of low-priced sanitary dwellings and the pressure of the law together may make the insanitary tenement an utterly unprofitable investment.

PUBLIC HEALTH AND THE GOVERNMENT

It is a singularly felicitous coincidence that the last address given by the President-elect as a private citizen should have been delivered on Washington's birthday, at the University of Pennsylvania, on the subject of "The Present Relations of the Learned Professions to Political Government." No occasion could be more appropriate for such an address than the birthday anniversary of our first President, nor any place more suitable than the seat of the first American university, organized in 1765, which granted, in 1768, the first medical diploma issued in America. The recognition of the obligations which members of the learned professions owe to the government and the emphasis of the political duties of the educated classes are most opportune. Mr. Taft's address can be accepted as a forecast of the character of his coming administration.

After emphasizing the "duty of every citizen, no matter what his profession, business or trade, to give as much attention as he can to the public weal and to take as much interest as he can in public matters," Mr. Taft discusses the relation of the different professions to the government. While the entire address is thoroughly worthy of careful consideration, the views expressed regarding the present relations existing between the medical profession and the government are of especial interest. After discussing the minister, the teacher, and the journalist, Mr. Taft says: "The next profession for consideration in its relation to governmental matters is that of medicine. Until very recently its influence has been practically nothing in a professional way. . . . Of late years . . . the functions of government have widened and now embrace, in a real and substantial way, the preservation of the health of all the people." The advances which have been made along sanitary lines in recent years are enumerated, including the increasing importance of medical work in the tropics, the value of sanitary administration in maintaining the Army and Navy and in the construction of the Panama Canal, the prosecution of which, Mr. Taft says, has been rendered possible by the "triumph, in the name of the medical profession, in the discovery of the real cause of yellow fever and malaria and the suppression of those diseases." Mr. Taft further declares that modern sanitary engineering "confirms the governmental importance of the profession of medicine and the kindred technical professions of chemistry and engineering and all branches of physical research."

Particularly interesting are his views on the necessity and possibility of a national department of public health. "So marked has been this increase in the importance of the medical profession in governmental agencies that the doctors themselves have organized a movement for the unification of all agencies in the federal government used to promote the public health in one bureau or department, at the head of which they wish to put a man of their own or kindred branch of science. How near this movement will come in accomplishing the complete purpose of its promoters only the national legislature can tell. Certainly the economy of the union of all health agencies of the national government in one bureau or department is wise." Discussing the advisability of placing a physician at the head of such a department, Mr. Taft very truly says that it is "the capacity to organize, to coordinate and execute that is needed at the head of a department and not so much deep technical or professional skill." Far more important, however, than the discussion of the future head of such a department are Mr. Taft's views regarding the importance of governmental recognition and approval of the results of modern medical science: "It is becoming more and more clear that the extension of governmental duties into a territory covered by the profession of medicine is bringing physicians more and more into political and governmental relation and we may expect that in the next decade they will play a far greater part than they have heretofore and it is proper that they should."

Mr. Taft's admirable address shows plainly that he is in complete accord with the present movement for the conservation of the lives and health of the people and that during his administration we may anticipate some definite and tangible developments in the suppression and prevention of unnecessary and avoidable diseases. Whether the national health organization shall be a bureau or a department, whether it shall be headed by a physician with executive ability or a trained layman of scientific standing, these questions are all matters of administration and expediency and are comparatively trivial in comparison with the great object of such a movement—the saving of life and the reduction of disease and suffering.

THE COUNCIL ON PHARMACY AND CHEMISTRY; ENCOURAGING OUTLOOK

After four years of campaigning against conditions that, even to the most optimistic, seemed discouraging at first, it is now quite apparent that, with eternal vigilance and constant advance, the Council on Pharmacy and Chemistry need not fear the ultimate results of its work. The warm appreciation and support accorded to this body by an ever-increasing number of practitioners leave no room for question as to the fruitfulness of its labors. That the work has been burdensome is, of course, well known, but it is not so clearly appreciated that, while the work is done primarily for the clinician, it was at first carried on almost entirely by a group of altruistic men who had, themselves, no clinical interests and whose only reward lay in a sense of loyally serving an important cause. It has been frequently evident, however, that some of the questions to be decided have in them points that can be satisfactorily passed on only by those who, while trained to sharp appreciation of the purely scientific aspects of the questions, also possess training and experience in practical bedside work.

Recognizing this, the Board of Trustees last year appointed two clinicians to the Council; and the desirability of adding a practitioner, who should represent other fields of medical practice, has just been evidenced in the appointment of Dr. John Howland of New York. Dr. Howland is instructor in contagious diseases in the College of Physicians and Surgeons of Columbia University. His special fitness for the work is attested by the fact that he has had long training in the problems of general pathology as they relate to clinical work, as well as in chemical investigations dealing with questions of digestion and metabolism. In addition to this, he has been continuously engaged in a general medical hospital service and in teaching, his specialty being pediatrics. His training will therefore be of special value to the Council in passing on questions bearing on the treatment of infectious diseases, the use of serums, etc., as well as in connection with the details of treatment in diseases, especially of infancy and childhood.

One of the most encouraging things connected with the advance of therapeutic reform is the spontaneity with which men, already laboring under diverse and burdensome daily work, accept as a duty the further tasks which membership in the Council imposes on them. This point receives further emphasis elsewhere in this issue,[1] where attention is called to the number of scientists, not connected with the Council, whose services have been freely given in investigations which have proved of incalculable benefit not alone to the Council, but also to the medical profession.

THE INTERNATIONAL OFFICE OF PUBLIC HYGIENE

The growth of a better understanding among nations is well shown by the recent establishment of an international office of public hygiene at Paris. The idea of having such an office for the purpose of collecting information concerning the communicable diseases, especially cholera, plague and yellow fever, was first presented for consideration at the International Sanitary Conference of Paris in 1903. At that conference there was signed an international sanitary agreement, which, among other things, contemplated the creation of an international office of public hygiene, and the task of organization was left to the French government. Plans for the organization and conduct of the proposed office were accordingly prepared and made the subject of a conference held in Rome, Dec. 3-9, 1907. As a result of this conference an arrangement and organic statutes were edited and signed by delegates from twelve countries. This instrument was ratified by the President of the United States by and with the advice of the Senate, Feb. 15, 1908. Our country will therefore participate in the benefits to be derived from this international arrangement, and to the U. S. Public Health and Marine-Hospital Service† much credit is due for bringing this about. The arrangement which was concluded for a period of seven years definitely authorized the new office, provided for its control by an international committee, outlined its duties, and apportioned the expense of maintenance among the interested countries. The principal objects of the new office are to collect and bring to the knowledge of the participating countries facts bearing on the public health, especially as concerns infectious diseases and their suppression. In sanitary matters, early and accurate information is essential to good administration. The new International Office of Public Hygiene should be able to supply this information more economically and promptly than can be done by an individual country, inasmuch as it is authorized to communicate directly with all national health agencies throughout the world. The information thus collected being both scientific and practical in character should be of great service in the quarantine and sanitary administration of the interested nations.

1. Pharmacology Department, page 716.
† U. S. Public Health Reports, Jan. 8, 1909.

MR. STRAUS AND THE NEW YORK MILK COMMITTEE

The practical benevolence of Mr. Nathan Straus, who for many years has maintained, single-handed, milk stations in New York and elsewhere for the distribution of properly modified and pasteurized milk, is a household word. New York has also another similar agency occupying itself with the feeding of infants, namely the New York Milk Committee, on which are many philanthropists of prominence, including several of New York's leading pediatricians. This latter institution, it seems, has not received the public support that it deserves, and is in some danger of extinction, in consequence. Mr. Straus generously came to its aid recently not only with expressions of regret at its critical condition and with a hearty commendation of the value of the work done by it, but also with practical financial aid; this, too, notwithstanding the expense entailed in the same cause by his own personal benefactions. It is to be hoped that this generosity will stimulate the general public of New York into more worthy cooperation until such time as the municipality itself shall realize its duty in this direction. We understand that the committee started its depots only last year, the object being to supplement the efforts of the Straus beneficence by unifying public opinion by the added experience and practices of a committee of citizens; but now it seems that a suggestion is made looking toward the unification of the milk philanthropies of the city so as to effect a big economy in money and effort. There are points of difference in procedure which certainly seem to warrant a continuance of the special work of the committee. For instance, while Mr. Straus' benefaction confines itself solely to the distribution of pasteurized milk, placing absolute safety before all other considerations, the committee has instituted comparative observations as to the relative nutritional value of a milk, pure at the outset, when served raw and when subjected to pasteurizing temperature. It has further laid stress on the importance of having mothers nurse their babies, and, in the event of their being unable to do so, of teaching them to modify and prepare the milk at home. It is to be hoped that some means of unification will be able to be effected which shall preserve the valuable characteristics of both organizations.

Medical News

ALABAMA

Hospital Staff Election.—At the annual meeting of the staff of St. Vincent's Hospital, Birmingham, February 10, Dr. Cunningham Wilson was elected president; Dr. Lewis Whaley, vice-president, and Dr. Carl A. Fox, secretary.

Personal.—Dr. Edward L. Marechal, Mobile, announces that he is no longer connected with the *Mobile Medical and Surgical Journal*.——Dr. Herschel W. Bass has been made physician at the Bryce Hospital, Tuscaloosa.——Dr. Rhett Goode has been re-elected health officer of Mobile; Dr. Charles A. Mohr, chairman of the committee of public health, and Dr. Eugene De B. Bondurant, secretary of the board of censors.——Dr. Thomas J. Brothers has succeeded Dr. Emmet K. Moon as city physician of Anniston.

Physicians Exonerated.—The Lauderdale County Medical Society, by unanimous vote, has sustained the verdict of the board of censors of the society exonerating Dr. Albert S. Zimmerman, Florence, county health officer, against whom a charge of incompetency is said to have been preferred by Dr. Eugene C. Lindsay in December last.——The grand jury, after thorough investigation of the charge against Dr. Thomas A. Jones, East Lake, Birmingham, due to the sudden death of J. A. Baker, supposedly by poison, has exonerated Dr. Jones.

CALIFORNIA

Tuberculosis Clinic Opened.—The first free tuberculosis clinic in San Francisco was opened informally January 18. Twenty applicants for treatment appeared on the first day.

Found Not Guilty.—Dr. Kathryn Ellis, Bakersfield, charged with the murder of Mrs. William Eardley, was found not guilty January 30, after a jury deliberation of less than ten minutes.

Lilianstein in San Francisco.—Dr. Siegfried Lilianstein, a well-known alienist of Nauheim, Germany, arrived in San Francisco from Japan, February 6, on a trip around the world. He is making special investigations on this journey of the conditions obtaining in hospitals and asylums for the insane.

Affiliates with State University.—The College of Medicine of the University of Southern California has become affiliated with the University of California, Berkeley, the application of the faculty of the former institution for transfer having been approved by the trustees of the University of Southern California January 28.

Personal.—Dr. Victor G. Vecki, San Francisco, has returned from Europe and resumed practice.——Dr. Ralph W. Avery, South Pasadena, has taken the practice of Dr. George A. Broughton, Oxnard, who after postgraduate work in the east, will locate in Los Angeles.——Dr. Frederick T. Bicknell, Los Angeles, for nearly ten years president of the California Hospital, who was recently retired at his own request, was presented with a gold watch by his colleagues at a dinner given in his honor.——Dr. Charles H. Whitman, Los Angeles, has been appointed superintendent of the county hospital, vice Dr. David C. Barber.——Dr. William R. Severson, Los Angeles, has moved to Goldfield, Nev.——The cottage of Dr. Samuel P. Reed, Mayfield, was burned with all its contents February 10.

COLORADO

Physician Fined.—Dr. Andreas Anderson, Ault, is said to have been fined $600 and costs February 10, for selling liquor without a license, and to have paid the fine.

New Buildings at Naval Tuberculosis Hospital.—The Federal Government is about to erect fifty new buildings at the Naval Hospital, New Fort Lyon, at a cost of $150,000. Each building will accommodate three patients.

Bequest to Aid Study of Tuberculosis.—By the will of the late Dr. Charles Denison, $10,000 is bequeathed for the furtherance of the study of tuberculosis. The will stipulates that a prize of $1,000 shall be given biennially for the best essay presented.

State Board Election.—The State Board of Health, at its annual meeting, February 10, elected Dr. Vivian R. Pennock, Longmont, president; Dr. Lewis E. Lemen, Denver, vice-president; Dr. Hugh L. Taylor, Denver, secretary, and Dr. Crum Epler, Pueblo, treasurer.

Students' Medical Society.—A medical society has been formed by the students of the Medical School of the University of Colorado, based on the plans of a county medical association, and known as the Students' Medical Society of the University of Colorado. Meetings are held twice a month, and in addition to papers presented by the students, men of prominence in the medical profession present papers at each meeting.

Personal.—Dr. Julius L. Mogulesko has resigned as bacteriologist of National Jewish Hospital for Consumptives, Denver, and has returned to New York City.——Dr. A. G. E. Nordlander, Boulder, has been appointed physician of Boulder county.——Dr. Benjamin L. Jefferson, Steamboat Springs, has been appointed registrar of the State Land Board.——Dr. William T. H. Baker, Pueblo, was operated on at St. Joseph's Hospital, Denver, January 20.

Physicians' Post-Graduate Clubs.—The Post-Graduate School of Latimer County Medical Society, at its meeting, February 10, adopted resolutions recommending that the law requiring a tax on all dogs be rigidly enforced, and that all dogs not taxed be impounded or killed.——At the meeting February 17, infectious diseases were discussed, and Dr. George Glover, head of the Veterinary Department of the State Agriculture College, explained the necessity for and the results arising from

the investigation of milk, meats, fruits, vegetables and other food products.——The Fremont County Physicians' Post-Graduate Club was organized January 18. Dr. Royal C. Adkinson, Florence, was elected director, and Dr. Wilbur T. Little, Canon City, reporter. The club will take up the course of study prescribed by the American Medical Association.

CONNECTICUT

Tuberculosis Dispensary Opened.—On February 9, the Fairfield County Antituberculosis Association opened its dispensary at Bridgeport. A number of physicians of the city have volunteered their services as staff and the dispensary will be open from 12 to 1, 5 to 6, and from 7 to 9 p. m. The work of the association is not only for the relief and cure of the suffering, but is also intended to be educational and prophylactic.

January Deaths.—During January there were 1,359 deaths, 80 more than for the previous month, 198 less than for January, 1908, and 130 less than the average for the month for the five years preceding. The death rate for the entire state was equivalent to an annual rate of 15.8 per 1,000. The deaths from infectious diseases were 226, or 16.6 per cent. of the total mortality. Pneumonia, nervous diseases, tuberculosis and heart diseases, in the order named, were the chief causes of death.

Personal.—Dr. Winford H. Smith, superintendent of Hartford Hospital, has been selected as chief medical superintendent of Bellevue and Allied Hospitals, New York City. An informal dinner was given by the medical and surgical staff of the Hartford Hospital to Dr. Smith, February 1.——Dr. George E. Ober has been re-elected president of the Bridgeport board of health.——Dr. Kenneth E. Kellogg, New Britain, has suffered the loss of his wife, February 6, from peritonitis, following an operation for appendicitis.

FLORIDA

Personal.—Dr. James H. Randolph, Chattahoochee, has been appointed assistant physician at the Florida Hospital for the Insane, Chattahoochee, vice Dr. Robert L. Goodbred, resigned.

State Health Day.—On February 12, which was designated by the Superintendent of Public Instruction as "State Health Day," programs were carried out in the various schools, including quotations regarding health, care of the body, fresh air, and alternating readings of sections from the health catechism.

Tuberculosis Exhibit.—The traveling exhibit of the National Association for the Study and Prevention of Tuberculosis, which is located during January, February and March in Florida, opened in Jacksonville, January 23. The exhibit then was moved to Pensacola, from there will be taken down the East Coast and afterward to Tallahassee.

Improvement in State Hospital.—The Board of Commissioners of State Institutions has made provision for two clinical assistants, graduates of reputable medical schools, at a salary of $30 per month and board. After April 1 a visiting staff will be appointed, consisting of not more than seven physicians of the state, each of whom shall be a specialist in the particular field in which he is appointed; the visiting staff to serve without compensation, but their expenses on official business to be defrayed by the state.

State Board of Health Report.—At the annual meeting of the State Board of Health, February 10, Dr. Joseph Y. Porter, Key West, state health officer, reported that during the year 59 cases of smallpox, 114 cases of malarial fever, 247 cases of diphtheria, 396 cases of typhoid fever and 393 cases of tuberculosis had been reported. Special subjects relating to sanitation and individual hygiene were discussed from time to time in the monthly sanitary publication of the board. He made the following recommendations: That the measures for promoting and protecting health, recommended in 1907, be presented to the legislature again this year, emphasizing the necessity of, and asking for, such remedial assistance as this enactment would give; that the board be vested by the legislature with such authority to make and enforce rules as is conferred on the Railroad Commission; that it be empowered to make rules and regulations with authority to enforce the same; that a bureau of vital statistics be made a feature of the state government with prompt reports of all births and deaths; that the station-houses, waiting-rooms and sleeping cars be kept clean, well ventilated and sanitary; that authority be given the board to assist within reasonable limits the indigent tuberculous of the state; that it be given permission to accept gifts from philanthropic persons, either of money or lands, and apply the same as they think best, and that it may be empowered to equip a laboratory for the investigation of disease agencies.

GEORGIA

Tuberculosis Sanatorium in Atlanta.—A tract of thirty-six acres on Peachtree Road has been purchased for $10,000 for the establishment of a sanatorium for the treatment and cure of tuberculosis. Dr. William S. Kendrick has been selected as medical director of the sanatorium, and Dr. Lewis M. Gaines as assistant medical director.

Personal.—Dr. Herbert Rushin, Dublin, has succeeded Dr. Charles Hicks as local surgeon of the Wrightsville and Tennille Railroad.——Dr. Thomas D. Longino has succeeded Hubert L. Culberson, resigned, as trustee of the Grady Hospital, and Dr. Joseph H. Bradfield has succeeded Dr. William B. Armstrong, deceased, as a member of the board of health of Atlanta from the second ward.

Grady Hospital Board.—At the meeting of the Grady Hospital Medical Board, Atlanta, Dr. Rufus T. Dorsey was elected chairman; Dr. William S. Goldsmith, vice-chairman, and Dr. Cyrus W. Strickler, secretary. Dr. Dorsey has appointed the following committees: Medical matters, Drs. George H. Noble, Charles G. Giddings and John C. Olmstead; examination, Drs. James N. Ellis, Alexander W. Sterling and Luther P. Stephens; conference, Drs. John G. Earnest, Luther C. Fischer and Willis B. Jones; and record, Dr. L. Benjamin Clarke.

ILLINOIS

To Honor Dr. Guthrie.—A special committee, of which Dr. William Cuthbertson is chairman, has been appointed by the Chicago Medical Society to investigate the claim of Dr. Samuel Guthrie as the discoverer of chloroform.

Personal.—Dr. John B. Legnard, Waukegan, sailed for Europe February 16.——Dr. Overton Brooks, Chicago, has returned from abroad.——Dr. Henry M. Drury, Altamont, who was adjudged insane, has been committed to the State Hospital, Anna.

Expectorators Arrested.—As a result of the crusade started again in Chicago by the health commissioner and the chief of police against men who spit on sidewalks, in street cars, and elevated trains, five violators of the ordinance were each fined $1 and $1 costs, February 17.

Plan to Prevent Blindness.—The Illinois commission to inquire into the condition of the blind will report to the legislature the following bills: To prevent ophthalmia neonatorum; to enlarge the State School for the Blind, Jacksonville; to rejuvenate the Illinois Industrial Home for the Blind, Chicago; to care for the aged blind; to create a state commission for the blind, and to appropriate $1,000 for a state census of the blind.

Millions Asked for Charity.—The State Board of Charities ask appropriations of more than nine and one-half million dollars for state charitable institutions for the coming biennium. In this budget provision is made for the establishment of one colony for the insane epileptics at Kankakee, and one at Anna; for a colony for improvable epileptics; for the purchase of a site for a new state hospital for the insane; for increased accommodation for the charges of the state, and for taking over the Cook County Hospital for the Insane, Dunning.

IOWA

Quarantine Power Vested in Local Boards.—With only three dissenting votes, the house of representatives is said to have passed the quarantine bill offered by the committee on public health, which takes the power of quarantine from the State Board of Health and vests it in local health boards.

Personal.—Dr. Thomas U. McManus, Waterloo, has been appointed a member of Iowa State Board of Health and Medical Examiners, vice Dr. Joseph H. Sams, Clarion, resigned.——Dr. George B. Maxwell, Long Grove, who has been seriously ill with typhoid fever, is reported convalescent.——Dr. Phineas J. Montgomery has been elected president; Dr. Frank W. Dean, vice-president, and Dr. Mary L. Tinley, secretary of the staff of the Jennie Edmundson Memorial Hospital, Council Bluffs.

Actions of the State Board.—The State Board of Medical Examiners at Fort Dodge is said recently to have revoked the license of Dr. Peter K. Dahl, Fort Dodge.——Dr. H. H. De Pew, Des Moines, formerly a hernia specialist of Chicago, is said successfully to have defended himself against charges of

illegal practice, brought before the State Board of Medical Examiners, which failed to confirm the charges by a vote of 3 to 3. In order to revoke a certificate, the vote of five of the seven members of the board is required.

MASSACHUSETTS

Bequest for Harvard.—By the will of Dr. John C. Cutler, Warren, Harvard College is made principal beneficiary to an estate valued at about $50,000.

Alumni Meeting.—Major General Leonard Wood, U. S. Army, was the guest of honor at the twentieth annual meeting and dinner of the Boston City Hospital Alumni Association. The following are the officers of the association: Dr. Morton Prince, president; Dr. Henry W. Broughton, vice-president; Dr. William H. Robey, Jr., secretary; and Dr. William H. Prescott, treasurer.

Health Officers.—Dr. Michael J. Shea has been elected chairman of the Chicopee Falls board of health.——Dr. Frederick J. Ripley has been nominated as a member of the Brockton board of health to succeed Dr. Joseph H. Lawrence.——Dr. Irvin L. Farr has succeeded Dr. Patrick E. Hurley as city physician of Holyoke.——Dr. Edward F. Johnson has been elected a member of the board of health of Chelsea.

MISSISSIPPI

Society Meetings.—At the annual meeting of Washington County Medical Society, held in Greenville, January 8, Dr. E. Frank Turner, Leland, was elected president; Dr. Andrew G. Payne, Greenville, vice-president; Dr. Marcus O. Shivers, Greenville, secretary; Dr. James S. Jackson, Belzona, delegate to the state association, and Dr. Owen W. Stone, Greenville, alternate.

Sanitarium to be Remodeled.—Dr. Julius Crisler has purchased the Jackson Sanitarium and announces that he will erect a modern hospital building to cost $15,000 on the original site, using the old structure as a training school for nurses and a ward for charity patients. He and his associates are preparing to form an organization to be known as the Jackson Charity Hospital Association, and he promises to donate to this organization the free use of eight wards for the indigent who are in need of hospital treatment.

Faculty Named.—The following are announced as the medical faculty of the medical department of the University of Mississippi, which is to begin work in Vicksburg in September of this year: Dr. Hugh H. Haralson, professor of theory and practice of surgery; Dr. Benson B. Martin, professor of theory and practice of surgery; Dr. Sylvan Meyers, professor of therapeutics and clinical medicine; Dr. Sidney W. Johnston, professor of clinical and operative surgery; Dr. Ewing F. Howard, professor of obstetrics and pediatrics; Dr. John S. Ewing, assistant in theory and practice of medicine; Dr. James H. Fox, instructor in dermatology; Dr. Henry F. Sproles, Jr., assistant in gynecology; Dr. Mace H. Bell, assistant in diseases of the eye, ear, nose and throat; Dr. John A. K. Birchett, assistant in obstetrics and pediatrics; Dr. Vincent Bonnelli, assistant in therapeutics and clinical medicine; and Dr. J. A. Austin, assistant in clinical and operative surgery.

NEW YORK

Hospital Managers Appointed.—The following appointments of managers of state hospitals have been made: Dr. Edwin H. Wolcott, Rochester, Gowanda State Hospital; Joseph Cameron, Hornell, Willard State Hospital; Alice Larken, New York, Middletown State Hospital; Dr. John Robinson, Saranac, St. Lawrence State Hospital, and Lillie Bowles Werner, Rochester, Rochester State Hospital.

State Tuberculosis Hospital.—Senator Schultz has introduced a bill for the establishment of a state hospital for the treatment of pulmonary tuberculosis, which carries with it an appropriation of $150,000 for the purchase of a site, the erection of buildings, etc. The governor is to appoint five trustees, two of whom are to be physicians. Preference in accommodation is to be given to indigent patients.

Vital Statistics for 1908.—There were 138,448 deaths recorded in New York during 1908, and, based on the United States census of an estimated population of 8,546,356, the death rate for the year was 16.2 per 1,000. In 1907 the death rate was 17.5 per 1,000, with 9,449 more deaths. The average death rate for the last five years was 17.2 per 1,000. The death rate in Greater New York was reduced from 18.5 to 16.8 per 1,000. Rochester shows a death rate of 14; Buffalo of 15.5; Schenectady of 13.3; Yonkers of 15.3; Troy of 20.1; Rome of 19.4, and Utica of 19 per 1,000. The number of deaths from pulmonary tuberculosis was 14,316, showing an increase. Pneumonia caused 8,602 deaths. The number of deaths from cancer is steadily increasing. The total number of births was 203,159. In New York City the birth rate was 29. There were 20,000 fewer marriages during 1908 than in 1907.

State School of Sanitary Science and Public Health.—Dr. Eugene H. Porter, State Health Commissioner, in his annual report, urges the establishment of a School of Sanitary Science and Public Health at Cornell University for the purpose of training men to serve the state in public office in the protection of public health. Only $10,000 a year has been allowed him for his work against tuberculosis. He states: "The state has spent far more money for the protection of the health of cattle than it has for its citizens. Hundreds of thousands of dollars are spent annually for purposes the importance of which fade into insignificance when compared with such subjects as the prevention of tuberculosis, typhoid fever and blindness." Dr. Porter has mapped out a campaign of education to prevent ophthalmia neonatorum, and his report gives startling figures as to the dangers of ophthalmia neonatorum and the amount of preventable blindness in the state. He believes that universal pasteurization of milk should not be required, unless it can be shown that the method is not only practicable, but harmless in its results. There should be a scientific study of the pasteurization of milk and a better supervision of dairies and the bottling and distribution of milk.

New York City.

Personal.—Dr. Harry W. Lincoln has been appointed gastroenterologist of the Eastern District Hospital and the Samaritan Hospital, Brooklyn.

Public Policy Justifies Sea Burial.—The suit instituted by Dr. Chalmer Prentice against the North German Lloyd Steamship Company, for $250,000, on account of the burial of the body of his wife at sea, has been decided in favor of the steamship company.

Brooklyn Physicians Protest.—The Kings County Medical Society and the Kings County Homeopathic Medical Society have joined in a protest against the action of Commissioner Darlington in removing the assistant sanitary superintendent from the borough of Brooklyn and transferring the records of the local office to Manhattan. They threaten to take court action unless the records are returned.

Alumni Reunion.—The alumni of the College of Physicians and Surgeons in the City of New York will celebrate the fiftieth anniversary of the founding of their association by a dinner at Sherry's March 2. Dr. Samuel W. Lambert will preside. Among the speakers will be President Nicholas Murray Butler, Mr. Seth Low, Dr. Henry A. Christian, Boston, Rev. Dr. Richards, New York City, and Dr. John G. Curtis.

Gas Rebates for Tuberculosis War.—The people of New York have been asked by the Committee for the Prevention of Tuberculosis of the Charity Organization Society to assign their claim to gas rebates to this committee. It is stated that if the $12,000,000 which is to be distributed to the gas consumers were given to the work against tuberculosis the disease could be practically stamped out of the United States.

Mechanicotherapy at Vanderbilt Clinic.—A new department of mechanicotherapy was opened at the Vanderbilt Clinic, of the College of Physicians and Surgeons, February 18. The equipment, consisting of thirty steel machines, was the gift of Mrs. Ray Matshak. Dr. Charles H. Jaeger, chief of the orthopedic division and instructor in orthopedic surgery in the College of Physicians and Surgeons, will have charge of the department.

Blames School System for Deaths.—Dr. Thomas Darlington, Commissioner of Health, states that heart disease among school children is greatly on the increase. Of the defective children in the schools that have been examined, 3,500 had heart disease in some form. During the past two years 1,234 children have died from heart disease and only 131 of these were under 5 years of age. With the beginning of school life the rate increased from 28 at the age of 4 years to 286 at the age of 15.

Money for Charity.—The will of the late Mrs. Margaret Dows leases to the Daisy Fields Home and Hospital for Crippled Children and to the Presbyterian Hospital $5,000 each.——The will of the late Mrs. Franklin B. Lord leaves $5,000 to the Presbyterian Hospital.——The German charity ball, on January 28, netted $11,000. Of this sum the committee has given to the German Hospital and Dispensary $2,000; to

St. Mark's Hospital, $1,300; to St. Francis Hospital, $1,300; to the German Polyclinic, $1,300, and to the West Side German Dispensary, $4,900.

Ambulance Service Discontinued.—Charles B. Grimshaw, superintendent of Roosevelt Hospital, in his annual report, agreed with the trustees with regard to the discontinuance of the public ambulance service. He is of the opinion that the ambulance service of the city, to be efficient, must be conducted as a unit. Roosevelt Hospital will care for patients brought there in other ambulances if there are vacant beds, but ordinarily the free beds are all taken by those who apply in person. The discontinuance of the ambulance service means an annual saving of $3,000 to the hospital.

Library of the Academy of Medicine.—In a letter to its members the New York Academy of Medicine states that the last year has witnessed a marked increase in the use of the library. The reading room was used at all times, and in a few years will be quite inadequate. There has been an increase of 2,532 pamphlets during the year, most of which were donated. There have been 3,212 volumes added to the library, a slight increase over the previous year. The collection of old and rare books contains 15 volumes published before 1500. During the year the Paris theses for the school years 1902-03 and 1907-08 have been added to the library, and it is regretted that there are not also complete sets of the German theses.

PENNSYLVANIA

Officers Elected.—At the February meeting of the Southwark Medical Society, the following officers were elected: President, Dr. Max Staller; vice-president, Dr. Aaron Brav; secretary, Dr. M. B. Cooperman; and treasurer, Dr. M. Blumberg.——At a recent meeting of the West Philadelphia Medical Association the following officers were elected: President, Dr. F. Mortimer Cleaveland; vice-president, Dr. Sherman F. Gilpin; secretary, Dr. George M. Boyd; financial secretary, Dr. Walter M. Miller; and treasurer, Dr. Edmund L. Graf.

Philadelphia

Organization of Psychiatric Society.—The following is the corrected list of the officers elected by the newly-organized Philadelphia Psychiatric Society: President, Dr. Charles W. Burr; vice-presidents, Drs. Albert R. Moulton, and William W. Richardson; secretary and treasurer, Dr. Wilfred W. Hawke; councilors, Drs. William H. Hancker, John K. Mitchell and Francis X. Dercum.

Tuberculosis Exhibit Opened.—The International Tuberculosis Exposition was formally opened in this city on February 15, and has been very largely attended. The exhibition is open from 10 a. m. to 10 p. m., and public lectures are delivered by prominent men at each morning and evening session. The total attendance for the week aggregated 69,124 and the largest attendance was on February 20, when 17,957 persons were in attendance.

Personal.—Dr. Joseph Price is confined to his home suffering with an infected hand.——Dr. S. Lewis Ziegler is seriously ill with facial erysipelas.——Dr. Charles K. Mills, who has been suffering with a severe attack of influenza, is convalescent.——Dr. John V. Shoemaker, who has been critically ill at his home as a result of a cerebral hemorrhage, is convalescing.——Dr. S. Weir Mitchell celebrated his seventy-ninth birthday anniversary February 15.——Dr. G. B. Gordon sailed for Europe February 18.——Drs. Joseph M. and Austin O'Malley have resigned as visiting physicians to St. Agnes' Hospital.

To Aid Matriculates.—In view of the fact that many applicants for admission to the Medical Department of the University of Pennsylvania this year will be unable to meet the new requirements, especially in physics, chemistry and zoology, provision has been made to ensure the entrance of those otherwise prepared. Applicants may enter, conditioned in the subjects above named with the understanding that these conditions be worked off. The University Summer School has provided courses, the successful completion of which will ensure admission without condition. The summer school will be in session daily except Saturdays for six weeks, beginning July 6 and ending August 17.

Sanatorium for Consumptive Jews.—Feeling the need for a separate institution for the treatment of indigent Jews suffering from tuberculosis, the Hebrews of the southern section of the city have raised funds and purchased a farm in Delaware county on which it is purposed to erect a sanatorium. The institution is to be known as the Philadelphia Jewish Sanatorium for Consumptives, and will be open for the reception of patients on May 1. The officers are: President, S. C. Krause; vice-presidents, Isaac Leopold and M. J. Speiser; treasurer, B. F. Miller; secretary, Dr. Abraham J. Cohen; financial secretary, Charles Lipschultz, and directors, S. K. Louchheim, Dr. Lazio S. Rubenson, Dr. Max Staller, Milton Merold, Benjamin Finberg and Rabbi Levintahl.

Filtered Water for Whole City.—Philadelphia's oldest water works at Fairmont, which has been supplying the city with water for 100 years, was put out of commission, February 19. This great turbine system supplied the city annually with 8,000,000,000 gallons of water. At the same time the great main containing filtered water was turned on and all but a small section of the city is now supplied with filtered water. By March 1, with the possible exception of two small districts, the whole city will be receiving filtered water. Of the 300,000,000 gallons required for the city's daily consumption, Torresdale will furnish 240,000,000 gallons, Roxborough 22,000,000 and Belmont 40,000,000. For the next three weeks, however, the health authorities warn consumers to continue to boil all water used for drinking purposes, as that length of time will be required to cleanse the service pipes of the accumulations of dirt deposited by the raw water.

SOUTH CAROLINA

Antituberculosis League Organized.—Anderson County Antituberculosis League was organized at Anderson January 19. Dr. Wallace H. Nardin was elected president, and Dr. J. Bennett Townsend assistant secretary and treasurer.

Societies.—At the annual meeting of the Fourth District Medical Society, held in Seneca, January 25, Dr. Edgar A. Hines, Seneca, was elected president; Dr. William A. Trippe, Easley, vice-president, and Dr. Ernest W. Carpenter, Greenville, secretary-treasurer. Easley was selected as next place of meeting.——At the January meeting of Lexington County Medical Society, held in Lexington, Dr. Drayton M. Crosson, Leesville, was elected delegate to the state medical association, and Drs. Luther B. Ethredge, Leesville, John R. Langford, Swansea, and Joseph W. Earle, Spring Hill, were appointed members of the executive committee. A resolution was adopted requesting the Lexington delegation in the general assembly to use its best efforts to have a law passed prohibiting indiscriminate expectoration on the floors and walls of railway passenger cars, public halls and sidewalks.——Chester County Medical Society, at its annual meeting held in Chester, January 4, elected Dr. James G. Johnson, Chester, president; Dr. David A. Coleman, Blackstock, vice-president; Dr. William B. Cox, Chester, secretary-treasurer, and Drs. Calvin B. McKeown, Fort Lawn, Harvey E. McConnell, Chester, and Robert L. Douglass, Rodman, censors.——Spartanburg County Medical Society, at its annual meeting held in Spartanburg, elected the following officers: Dr. S. T. D. Lancaster, Pauline, president; Dr. Albernon R. Fike, Spartanburg, vice-president; Dr. L. Rosa Gantt, Spartanburg, secretary; Dr. William J. Chapman, Inman, treasurer, and Drs. Julian H. Allen, Spartanburg, G. F. Williams and Fred L. Potts, Spartanburg, delegates to the state society.——Florence County Medical Society has elected the following officers: President, Dr. Frank H. McLeod, Florence; vice-president, Dr. Lawrence Y. King, Florence; secretary-treasurer, Dr. John H. Peele, Cartersville; censors, Drs. Lawrence Y. King, Dudley H. Smith and N. W. Hicks, all of Florence, and delegate to the state society, Dr. John G. McMaster, Florence.——At the annual meeting of Orangeburg-Calhoun Counties Medical Association, Dr. W. L. Pou, St. Matthew's, was elected president; Dr. Manly J. D. Dantzler, Elloree, vice-president; Dr. Donald D. Salley, Orangeburg, secretary; Dr. William B. Lowman, Orangeburg, treasurer, and Dr. Michael G. Salley, Orangeburg, censor.——Horry County Medical Society, at its annual meeting, elected Dr. Allard D. Lewis, Green Sea, president; Dr. John K. Stalvey, Buckford, vice-president, and Dr. Joseph S. Dusenbury, Conway, secretary.——At the annual meeting of Columbia Medical Society, the following officers were elected: Dr. Lewis A. Griffith, president; Dr. Francis A. Coward, vice-president; Dr. Mary R. Baker, secretary-treasurer; Drs. William Weston and William A. Boyd, delegates to the state medical association, and Dr. Samuel E. Harmon, censor.

VIRGINIA

Society Meeting.—The Richmond Medical Society, composed of colored practitioners, has elected the following officers: President, Dr. J. Alexander Lewis; vice-president, Dr. J. C. Carper; secretary, Dr. Oswald B. H. Bowser; and treasurer, Dr. Robert E. Jones.

Epileptic Colony.—The General Board of Directors of State Hospitals has appointed a committee of three to examine,

select and report a suitable location for the proposed state epileptic colony, and to take options on any suitable lands in Amherst county, and to do other acts which may tend to further the immediate establishment of the colony.

WISCONSIN

Opposes Free Advertising.—The Manitowoc County Medical Society has adopted resolutions declaring the advertising of physicians through the mention of names in newspaper accounts of illnesses, accidents, etc., obnoxious and unprofessional.

Appropriations Asked for Charities.—The board of control has reported to Governor Davidson that $691,700 would be required to put the charitable and penal institutions of the state in the best condition. Among the appropriations asked for are $36,000 for the State Hospital at Mendota, $111,500 for the Northern Hospital, Oshkosh, $62,000 for the Tuberculosis Sanatorium, Wales, and $50,000 for buildings for segregation at the sanatorium. Of the amount requested by the Oshkosh State Hospital, $60,000 is to be devoted to the construction of a building for the criminal insane.

Deaths in Wisconsin.—During 1908, 26,778 deaths were reported to the state health department, equivalent to a death rate of 11.5 per 1,000 of population. The most important cause of death in point of actual numbers was pulmonary tuberculosis, which caused 2,411 deaths, practically all of which were in individuals from 18 to 45 years of age. Other important death causes were pneumonia, 2,333; violence, 1,438; cancer, 1,221; enteritis of infants, 974; meningitis, 625; influenza, 392; diphtheria, 386; typhoid fever, 332; scarlet fever, 126; whooping cough, 124; and measles, 70. Of the deaths from violence, 263 were due to suicide, and 21 to homicide.

Society Meetings.—At the annual meeting of the Fox River Valley Medical Society, held in Green Bay, January 19, the following officers were elected: Dr. Bernard C. Gudden, Oshkosh, president; Drs. Norman P. Mills, Appleton, and Sherman E. Wright, Marinette, vice-presidents; Dr. Robert A. Walker, Menominee, Mich., secretary-treasurer (re-elected), and Dr. William G. Nickolson, Green Bay, censor.——At the annual meeting of the Milwaukee Physicians' Association, January 19, the following officers were elected: President, Dr. Arthur R. F. Grob; vice-president, Dr. E. Wells Kellogg; treasurer, Dr. Henry J. Gramling; secretary, Dr. A. A. Cooper; and censors, Drs. Peter Langland, Henry C. Werner and Fred W. Biehl.

WYOMING

Personal.—Dr. James J. Monahan, Encampment, has gone to Europe for graduate study.——Dr. Gaten A. Fox, Cheyenne, has been appointed local surgeon of the Union Pacific system.

Society Meetings.—At the annual meeting of Fremont County Medical Society, held in Lander, January 1, the following officers were re-elected: President, Dr. Thomas G. Maghee, Lander; vice-president, Dr. Albert B. Tonkin, Riverton; and secretary-treasurer, Dr. Neil D. Nelson, Shoshone, Drs. Arthur H. Cooper and T. W. Martin, Lander, and Frederick H. Sparrenberger, Fort Washakie, were elected censors. ——At the meeting of the Albany County Medical Society, held in Laramie February 5, the new constitution and by-laws were adopted and the society by resolution condemned the mention in the lay press of the names of attending physicians in connection with news items regarding injuries, accidents, etc.——At the annual meeting of the Crook County Medical Society, held in Sun Dance, Dr. Robert C. Knode, Sun Dance, was elected president; Dr. Paul W. Newcomer, Gillette, vice-president; Dr. Elizabeth Newcomer, secretary; and Dr. John L. Bostwick, Hulett, treasurer.

CANADA

Personal.—Dr. C. H. Godin, Ottawa, superintendent of the Marine-Hospital service of Canada, is making his annual inspection tour of Vancouver and Victoria, B. C.——Dr. Charles A. Page, formerly of Kingsville, Ont., has returned from Edinburgh, and commenced practice in Toronto.——Dr. Frank Beemer, Hamilton, for twenty years a member of the staff of the Ontario Hospital for the Insane, has resigned.——Dr. Wilbert McIntyre, M.P., Strathcona, Alberta, is to be deputy-speaker of the House of Commons, Ottawa.—Dr. William A. Young, managing editor of the *Canadian Journal of Medicine and Surgery*, has returned to Toronto completely recovered from his recent severe illness.

Hospital News.—The eleventh annual meeting of the Board of Trustees of the National Sanitarium Association, was held in Toronto January 10. Dr. W. B. Kendall, physician-in-chief of the two sanatoria in Muskoka, reported that in the Muskoka Cottage Sanatorium 220 patients had been cared for in the past hospital year, and 1,696 had been cared for in the institution since it was first opened eleven years ago. In the Free Hospital at Muskoka, 258 patients had been cared for. In the two institutions nearly 3,000 patients had been cared for during the last decade. Dr. Alfred H. Caulfield, the new director of the pathologic department, told of the complete arrangements made for research work at these institutions within the past three months, the expenses in connection with which were to be borne by a Toronto citizen. An ex-patient has donated $1,500 for the equipment of the laboratory; and another has agreed to donate $1,500 toward the annual salary of the pathologist. The Toronto Free Hospital for Consumptives has appointed a special visiting nurse to work among the tubercular poor of Toronto. The annual report of the Protestant Hospital for the Insane, Verdun, Que., shows that on Jan. 1, 1908, there were 535 patients, inclusive of 2 out on trial, in the institution; and that during the year 197 were admitted, making a total under treatment of 732. The patients discharged during the year numbered 109, 36 died and one escaped, leaving in residence at the close of the year 582 patients, exclusive of 4 out on trial. This is the largest number under treatment since the institution was opened. The most important contributing cause was the inferior class of immigrants brought to Canada. Seven per cent. of the patients in residence never should have been admitted. Nearly 39 per cent. of the inmates are of foreign birth. Of the patients admitted during the year, 79 were private and 118 public cases. No less than 12½ per cent. of the patients were epileptics; and it was to be deplored that the Province of Quebec had no separate institution for these patients. Of the 109 who left the institution, 63 were discharged as recovered, 32 improved and 14 unimproved. The percentage of discharges based on admissions was 55.3, and the recoveries 33.2. The mortality rate was only 4.91 based on the total number treated, the lowest except in 1892 and 1906.

GENERAL

College Association Meeting.—The nineteenth annual meeting of the Association of American Medical Colleges will be held in the Academy of Medicine, New York City, March 15 and 16, under the presidency of Dr. Eli H. Long, Buffalo, N. Y. The Manhattan Hotel has been chosen for headquarters, and the chairman of the local committee on arrangements is Dr. Egbert LeFevre, 52 W. Fifty-sixth street.

Alleged Automobile Insurance.—A short, stout individual, about forty-eight years of age, a good talker, who gives the name of Ed. S. Raynor, and claims to be manager and treasurer of the Automobile Underwriters, with headquarters in Massillon, Ohio, is reported to be selling policies providing against accidents to automobiles and automobilists and thefts of automobiles. In conjunction with this, he is said to appoint one physician in each town as surgeon of the company to take care of any policy holder who may become injured, the company paying for such care at the rate of $2.50 per visit, and also paying such appointee an annual retaining fee of $200. The policy is said to cost from $25 up, according to the value of the car. Inquiry made by Dr. Henry M. Osborne, Youngstown, through the First National Bank of Massillon, brought the reply that no such company was known in that city, and that the chief of police had received inquiries about the company, but could find no such firm nor any person named Ed. S. Raynor.

FOREIGN

Danish Medical Association Asks Adequate Accommodations for Insane.—The two houses of parliament in Denmark recently had a communication read to each by a medical member setting forth the utter inadequacy of the present accommodations for the insane in Denmark and the urgent need for enlargement of existing institutions or erection of new. The petition is signed by all the members of the national medical association, each with his official titles. Copies of the petition were also presented at the same time to the minister of justice and the executive authorities at Copenhagen. The petition states among other things that it is as inhuman to deprive an insane person of the treatment and care on which his recovery and life may depend as it would be to turn away from the hospital a person requiring an emergency operation.

London X-Ray Convention.—This convention, with an exhibition of Roentgen and electro-medical apparatus, will be held in London, England, July 6-9, 1909. All branches of medical electricity will be represented. The inaugural meetings, the

general meetings, the demonstrations and the exhibition will be held at the University of London, University College, Gower street, W. C. The exhibition will include all classes of electrical and physical apparatus for medical treatment. Delegates will be present from America and Europe, and representatives of the various foreign governments will be invited to take part in a discussion as to the best means of providing apparatus and training for the army and navy. The papers and debates will be in English. Papers in French and German will be accepted, provided summaries of such papers are sent in English. All papers will be reported either "in extenso" or in abstract in the Archives of the Roentgen Ray. All communications should be addressed to Ernest Schofield, Organizing Secretary of the X-Ray Convention, 11, Chandos Street, Cavendish Square, London, W.

LONDON LETTER

(From Our Regular Correspondent)

LONDON, Feb. 13, 1909.

Another Victim of the X-Rays

The sad case of Mr. Hall Edwards, the pioneer worker with the *x*-rays in medicine in Great Britain, who has lost both his hands, has been previously described in THE JOURNAL. A similar misfortune has befallen Mr. Cox, one of the leading manufacturers of *x*-ray apparatus in London. The greater part of his right hand, including three fingers, has had to be removed, but the thumb and little finger have been saved. Some years ago he lost one of the fingers of the left hand and another operation is to be performed on it. He also has some dermatitis on the chin. As in the case of Mr. Hall Edwards, these results are due to the lack of knowledge of the dangers of the *x*-ray work which existed in the earlier years of their application to medicine.

Third Interim Report of the Royal Commission on Tuberculosis

The Royal Commission, appointed in 1901 to inquire into the relation between human and bovine tuberculosis, after the startling pronouncement of Koch at the International Congress on Tuberculosis held in London in the previous year that these diseases are distinct, still continues its labors. The commission originally consisted of Sir Michael Foster and Professors Sims Woodhead, Martin, McFadyean and Boyce. Sir Michael Foster died while the work was in progress. The earlier reports of the commission published in 1904 and in 1907 have been noticed in previous letters to THE JOURNAL. They were in direct contradiction to Koch's views. It was found that bovine tuberculosis is communicable to man and that a considerable amount of tuberculosis, especially in children, is due to milk containing the tubercle bacilli. The present report brings some new and important facts to light. The danger of milk yielded by tuberculous udders is well recognized, but the report shows that the milk of cows suffering from visceral tuberculosis in a large proportion of cases contains virulent tubercle bacilli, although the udders may be perfectly healthy. The report deals with 6 cows, of which 3 showed obvious signs of tuberculosis, such as cough and emaciation, while the other three were apparently healthy and tuberculosis was revealed only by the tuberculin test. The milk of the three cows which were obviously diseased caused, though not invariably, tuberculosis in guinea-pigs which were inoculated with small doses. The milk of those in which the disease was revealed only by the tuberculin test did not produce tuberculosis in guinea-pigs. Swine fed with the milk of these cows became tuberculous. This is important, because it is a common practice to feed pigs with the milk of sickly cows, which is not considered good enough for human consumption. The danger of this practice is obvious, as the pigs are eventually used as food for man. The feces of 5 out of 6 of these cows were found to contain virulent tubercle bacilli. This is another source of infection, for in practically all but the best-regulated model farms the cleaning of the udders and quarters of milch cows is confined, if attempted at all, to a perfunctory scrub with a wisp of dry hay. The amount of fecal matter that habitually finds its way into milk would surprise and sicken most persons. The result of these experiments will be an impetus to the movement which has been in progress some time for obtaining a better milk supply and for greater cleanliness. The commissioners again repeat their previous statement, in contradiction to Koch, that milk of tuberculous cows is dangerous to man.

Sir Patrick Manson: The Steps of a Great Discovery

Though Sir Patrick Manson's discovery of the mosquito origin of filariasis and his extension of this fact as a hypothesis to the origin of malaria are famous, the steps by which he was led to these epoch-making discoveries are not generally known. Speaking at a dinner at which he was entertained by the Society of Authors, he told the story of these discoveries which proved some of the most beautiful examples of deduction ever made in medicine. An earlier worker on tropical diseases, Timothy Lewis, discovered the *Filaria sanguinis hominis* in the blood in elephantiasis. As it wriggles about in a loose sheath and shows no evidence of growth nor power of reproduction, Manson concluded that it must be the young of some other animal. This he found to be the adult filaria which lies in the lymphatics. Between the mature animal and its progeny no intermediate forms could be discovered. The question then arose, how does the young parasite contrive to pass from man to man? Although it actively moves about in its sac, it cannot escape from this, and it has never been found in any of the normal excretions. As it could not escape spontaneously from the body, it occurred to Manson that there must intervene some agent capable of piercing the skin, and that this agent must absorb the blood of the human body, and with it the parasite. The agent which satisfied these conditions was the mosquito. Then Manson made his striking discovery as to the habits of the parasite which tended to confirm his hypothesis. He determined to examine the blood of 1,000 Chinese in order to find the frequency with which the parasite occurred in human blood. The task was so great that he trained two Chinese medical students to help him. They were occupied in hospital duties, one during the day and the other during the night. The one who had leisure to work during the night brought a large number of positive results, but the one who worked during the day seldom brought any. This fact led Manson to investigate the habits of the filaria and he found that in ordinary conditions of health filariæ came into the blood about sunset, increased in numbers toward midnight, and gradually disappeared toward morning. This periodicity seemed to be an adaptation to the nocturnal habit of the mosquito. Then Manson persuaded a Chinaman to sleep in a bed surrounded with a mosquito netting with a door which was closed after plenty of mosquitoes had entered. Next morning he found dozens of mosquitoes gorged with blood clinging to the walls of the tent. In their stomachs he found filariæ, which, instead of being killed, seemed to be stimulated to fresh activity and had broken through their sacs. The problem then arose, how does the filaria reach the human body? Manson traced it through the stomach wall of the mosquito, into the abdominal cavity, and then into the thoracic muscles, and ascertained that during its passage it increased enormously from the one-hundredth to the one-sixteenth of an inch. He conjectured, but wrongly, that it might escape into water and by that road reach the human body. Later, in England, with better appliances he traced it to the proboscis of the mosquito, where he saw it outstretched, evidently waiting for an opportunity to escape. By analogous reasoning Manson was led to the mosquito hypothesis of malaria.

PARIS LETTER

(From Our Regular Correspondent)

PARIS, Feb. 9, 1909.

Miller's "Consumption Cure" in Paris

THE JOURNAL has sent me[1] a clipping from the *Chicago Examiner* of January 24 regarding O. E. Miller and his "consumption cure." In the Chicago newspaper I read:

> "For the last week the sensation of medical Paris has been a new cure for tuberculosis which is being demonstrated at one of the municipal hospitals, where five deathbed cases of paupers in an advanced stage of consumption were selected by physicians. After permission had been given by the municipal board of charity they were turned over to the experimenter, a man who is neither a doctor nor a scientist, and he came to Paris only a few weeks ago virtually unknown. While his cure is a secret which he refuses to disclose, in spite of all these handicaps, he has convinced leading physicians that he has a marvelous cure for consumption and that after only three weeks' treatment the five paupers are on the way to health."

The famous "cure" of O. E. Miller is the one referred to. (See THE JOURNAL, Dec. 12, 1908, p. 2071; Jan. 16, 1909, p. 226). So far from having made any sensation in Paris or any impression on the medical world here, it was only with great effort and by the employment of the energy and ingenuity of a newspaper reporter that I finally succeeded in discovering the hospital where experiments with the "treatment" had been made. I was informed that the authorization to try this treat-

1. EDITOR'S NOTE:—We asked our Paris correspondent to investigate this sensational newspaper report.

ment had been granted, not to Miller, but to Dr. Hirtz, physician at Necker hospital. The administration of the Public Charities merely conformed to the rule of the hygienic service of the hospitals forbidding the heads of the said service, without express authorization from the administration, to allow any treatment to be experimentally tried on their patients, either by an outside physician or by the possessor of a secret remedy. My official informant declared skeptically that a week never passed in which the administration did not receive a request for permission to try some new "treatment" for tuberculosis, and that usually there was some "institute" behind the request.

Dr. Hirtz told me that Miller had been recommended to him by a surgeon of the hospitals, who personally guaranteed Miller's honorable character. He (Dr. Hirtz) was much surprised to learn from me of Miller's checkered career and of THE JOURNAL'S investigation. As for the five poor patients said by the correspondent of the *Chicago Examiner* to be on the road to recovery, the fact is that two of them are dead and the other three have left the Necker hospital and are therefore no longer under the control of Dr. Hirtz.

The correspondent of the *Chicago Examiner* writes that "it is probable that Miller's discovery will be taken before the French Academy of Medicine." I can affirm that this dream will never be realized. The Academy of Medicine has received a warning, apropos of recent communications on the subject of alleged cures of cancer, from the *Journal des praticiens*, edited by Dr. Huchard. Its last number declares that, in yielding attention to such unsubstantiated assertions, the Academy of Medicine would soon become a medium for the advertising of blatant fraud. The Academy is not an adjunct to the advertising pages of the newspapers or to the billboards.

Admissibility to the Agrégation and the Provincial Schools of Medicine

Besides the seven *facultés* or medical colleges there are in France a number of medical schools, called "preparatory schools" or *de plein exercise*. A delegation of the professors in these schools recently complained to the minister of public instruction and to the premier in regard to the new regulations concerning the candidates for the teaching positions. They presented, in the name of a large number of their colleagues, a resolution for the re-establishment of the former method of recruiting the teaching force of the schools, independent of the *concours de l'agrégation*. The minister of public instruction received the protest with the greatest attention, and the premier, M. Clemenceau, who, as a former pupil of one of the medical schools, takes an especial interest in them, declared himself ready to support the demands of the professors of the schools.

Accident to Professor Estor

Dr. Estor, clinical professor of surgery and orthopedics for children at Montpellier, was performing an operation recently when he pricked himself on the forearm with a bistoury. He attached no importance to the accident, but a few hours later he felt a sharp pain, and, shortly afterward, a phlegmon developed. Since then Dr. Estor's condition has caused grave anxiety.

BERLIN LETTER

(From Our Regular Correspondent)

BERLIN, Feb. 5, 1909.

Orth on the Origin of Cancer

At the last meeting of the Prussian Academy of Sciences, our leading scientific association, Professor Orth delivered an address on this subject, in which he stated that nothing to date sustains the assumption of a parasitic origin for cancer, although such may yet be proved. At present there is no analogy for such a kind of parasitism. These conclusions of the great pathologist will not be agreeable to those who have published discoveries of cancer parasites and have clung to their discovery with such tenacity. At the same time, it must not be forgotten that chance may yet reveal what systematic research has overlooked, like the discovery of the pale spirochete of syphilis by Schaudinn.

Conflict Between the Physicians and the Sick Benefit Societies at Cologne

The contract between the organized physicians and the *Krankenkassen* at Cologne having expired February 1, the societies refused to renew it on the same conditions, and the physicians have decided to refrain from attending the policyholders, even individually and for pay, except in emergency cases, until the matter is satisfactorily settled. The companies have secured seventy-two physicians, who have accepted their terms. Most of these physicians have a record as "strike breakers," and some are already under the ban of the medical tribunals of honor.

Consumptive Colony in German Southwest Africa

Some time ago a Berlin physician without any personal experience in the matter suggested the German possessions in Southwest Africa as offering peculiarly favorable climatic conditions for consumptives and zealously advocated the plan of sending out a colony. An influential committee was organized and funds collected, but the project has finally been abandoned, as the committee was unable to obtain testimony as to the climate being adapted for patients with pulmonary tuberculosis, while the expense is a great obstacle. The money collected is to be applied for the benefit of resident consumptives in this part of Africa. This experience ought to warn others not to launch enterprises for the public welfare without due consideration and information. It should also teach the lesson that physicians should not allow themselves to be taken in tow by every well-meant suggestion that comes along and waste their efforts in the service of Utopian schemes.

The Chair of Physiology

By the decision of the minister of finance the hygienic institute is to be transformed into an institute of physiology, and Rubner confirmed as professor of physiology. It is now certainly to be expected that Flügge of Breslau will be selected as the successor of Rubner.

Carnegie's Honorary Membership in the Robert Koch Foundation

The directors of the Robert Koch Foundation against Tuberculosis have unanimously elected Andrew Carnegie to membership in recognition of his generous subscription of half a million marks. It is to be hoped that his permanent interest in the undertaking may be thus assured.

A Judicial Decision Respecting Eddyism

Christian Science, imported from your country, has secured a considerable extension among us, although in late years it has receded somewhat. Our age is rich in contrasts. In spite of the greatest enlightenment in the field of religion, mysticism flourishes to-day more than ever, and to this latter circumstance is owing the introduction and spread of Eddyism in Germany. In spite of repeated exposures by the press, the representatives of this form of quackery still find believers who seek the help of God for the removal of disease in return for money payments to his unworthy representatives. Lately a Berlin court has expressed itself in no ambiguous terms regarding Eddyism, and the decision which shows an unusually accurate conception of the matter, even for a judge, should be widely known. A laborer of this city whose wife and child had been treated unsuccessfully by a prayer healer sued for the repayment of 60 marks which he had paid for the treatment. Although the lower court dismissed the suit, the higher decided that the prayer healer must repay the 60 marks with interest. In the decision it was emphasized that the contract which the complainant had made with the prayer healer was against good morals. It would be completely incompatible with healthy social conditions if judicial recognition should be given to contracts by which one party, for a stipulated sum, should make use of his pretended intimate relations with the deity in order to induce a pretended intervention of supernatural power in the life of other persons. The belief that there is some power of special divine grace for healing the sick may exist in certain circles. But laying claim to such a healing power in connection with the exercise of a trade for making money based on such healing power is contrary to the general moral sentiment and can not demand the protection of the courts. Moreover, the public interest in a regular system for the care of health is endangered if, by the influence of Eddyism, patients are deprived of suitable and timely treatment by physicians who should be the chosen guardians of the public health. Aside from the fact that by this decision the attention of the public is called in a highly satisfactory manner to the physician as the true helper in case of sickness, many Eddyite adherents may find themselves obliged to give up their business. For if their patients can demand their money back and enforce the demand by law, they will hesitate to spend their time and apply the power of their prayers at such risks. In the interests of the public health it would be very gratifying if the decision quoted should have so favorable a result.

Pharmacology

COUNCIL ON PHARMACY AND CHEMISTRY

Announcement of Election of Members and Acknowledgment of Cooperation

New Member.—At the recent meeting of the Board of Trustees of the American Medical Association, Dr. L. F. Kebler, chief of the Drug Laboratory, Department of Agriculture, and Dr. C. S. N. Hallberg, professor of pharmacy in the University of Illinois School of Pharmacy, were re-elected members of the Council on Pharmacy and Chemistry. Dr. John Howland, instructor in contagious diseases, College of Physicians and Surgeons of Columbia University, was elected to take the place of Prof. J. O. Schlotterbeck of the University of Michigan, who declined renomination.

Acknowledgment of Cooperation.—The Council on Pharmacy and Chemistry and the Board of Trustees have adopted a vote of thanks to the following for their cooperation and assistance in investigating products, and for special research work done at the request of the Council:

DANIEL BASE, PH.D., professor of chemistry and vegetable histology, Department of Pharmacy, University of Maryland.
WILLIAM B. DAY, PHG., professor of pharmacognosy, University of Illinois School of Pharmacy.
G. B. FRANKFORTER, PH.D., M.A., dean of the school of chemistry, professor of chemistry, University of Minnesota.
N. McL. HARRIS, M.B., assistant professor of bacteriology, University of Chicago.
P. G. HEINEMANN, PH.D., assistant in bacteriology, University of Chicago.
WILLIAM A. JOHNSON, PH.C., instructor in chemistry, Northwestern University Medical School.
E. O. JORDAN, PH.D., professor of bacteriology, University of Chicago.
EDWARD KREMERS, PH.G., PH.D., professor of pharmaceutical chemistry, director of the course in pharmacy, University of Wisconsin.
HENRY KRAEMER, PH.B., PH.D., professor of botany and pharmacognosy, Philadelphia College of Pharmacy.
CHARLES H. LAWALL, PH.M., associate professor of theory and practice of pharmacy, Philadelphia College of Pharmacy.
S. A. MATTHEWS, M.D., assistant professor of experimental therapeutics, University of Chicago.
HERBERT N. MCCOY, PH.D., associate professor of physical chemistry, University of Chicago.
W. J. MACNEAL, assistant professor of bacteriology; assistant chief in Research Laboratory of Physiological Chemistry, University of Illinois.
CHARLES H. MILLER, PH.G., M.D., assistant professor of pharmacology, Northwestern University Medical School.
ATHERTON SEIDELL, M.D., Hygienic Laboratory, Public Health and Marine-Hospital Service, Washington, D. C.
A. L. WINTON, M.D., chief of Chicago Laboratory, U. S. Department of Agriculture, Bureau of Chemistry, Chicago.

"MITCHELLA COMPOUND"

A Nostrum for "Women Who Dread Motherhood"

In the pages of those publications whose advertising ethics permits them to give publicity to fake cancer cures, to deaf-cure quacks or any other of the unsavory brood which Mr. Adams exposed in the "Great American Fraud" series, the advertisement of "Dr." J. H. Dye's "Medical Institute" may be found. Dye is one of the tribe that makes capital out of the fears of the expectant mother. After drawing lurid pictures of the "untold pains" to which the young mother may be a martyr, relief is promised if the sufferer will but use Dye's "Mitchella Compound." The value of "Dr." Dye's nostrum is testified to by a hypothetical Mrs. Dare, who relates how after losing her first child she had a vision. A "white-robed angel" appeared, who delivered a flowery speech, concluding with the following peroration:

"Go, sister, and seek freedom and peace in the use of *Mitchella Compound* and in following the teachings of that book."

The book referred to by the "white-robed angel" is a brochure put out by "Dr." Dye and sold for the nominal price of $2. The title is "Painless Childbirth," and needless to say, the author does not neglect to extol the use of Mitchella Compound.

"Dr." Dye's Mitchella Compound "speedily cures all derangements and irregularities of the menstrual function, congestion, inflammation, ulceration and displacement of the womb . . ." and other things too numerous to mention. This "heartease for weary women," we are told, "is composed of the purest and most carefully selected herbs which can be obtained." Possibly! But if after a period of drought one went to the woods and raked up a double handful of dried leaves, pieces of bark and any other débris that happened to be handy, the average man would find it difficult to distinguish between such rakings and "Dr." Dye's Mitchella Compound at $1 a package.

A sample of Mitchella Compound was examined botanically for us by Prof. William Baker Day of the University of Illinois. Professor Day reports as follows:

BOTANIC EXAMINATION

"I have examined botanically a sample of 'Mitchella Compound.' The sample consists apparently of a mixture of vegetable material, chiefly fragments of leaves, roots and bark, among which I have been able to identify the following:

"*Mitchella repens*—herb—commonly known as Partridgeberry or Squaw-vine.

"*Chamælirium luteum*—rhizome and roots—(*Helonias dioica*), commonly known as Starwort or False Unicorn Root.

"*Cornus Florida*—bark of the root—commonly known as Flowering Dogwood.

"*Cypripedium pubescens* or *Cypripedium parviflorum*, commonly known as Ladies' Slipper."

None of these drugs is new; all have been used at one time or another as medicinal agents, but, with the exception of ladies' slipper, have long been practically discarded as useless. Ladies' slipper, while officially recognized, is so little esteemed as a remedy that few text-books even mention it. Mitchella Compound is, in short, but one more of the innumerable cure-alls on the market in which discarded, unrecognized or useless drugs are pressed into service and invested with miraculous virtues. What shall be said of men who prey on pregnant women? Who create in the mind of the expectant mother the fear of untold agonies and then offer immunity to these suppositious tortures at the price of their worthless nostrums? Who, with the help of such publications as will accept their lying advertisements, do more to encourage abortion than even the professional abortionists themselves. There seems to be but one remedy: Speed the time when in their acceptance of advertising those publishers who fail to recognize decency as a moral obligation may be forced by public opinion to recognize its value as a business proposition.

Correspondence

The Optometrist and the School Child

To the Editor:—In THE JOURNAL, Jan. 30, 1909, page 402, comment is made on the Vermont optometry bill, in which optometry is defined as "the employment of any means other than the use of drugs for the treatment of the powers of vision and the adaptation of lenses for the aid thereof." It notes Vermont as the eleventh state recognizing and licensing optometry.

This involves a vital question and one phase of it is not yet grasped by the profession. Medical inspection of schools with examination of individual pupils is developing at a rapid rate and soon most school children will be examined with more or less regularly each year. All ophthalmologists recognize that it is impossible to make a satisfactory and scientific test of the refraction of a child without using a mydriatic, usually atropin. This, of course, ought to prevent the optometrists and opticians from prescribing lenses for children, but in actual practice this is not the case. As Gulick and Ayres show in their new book, "Medical Inspection of Schools," the physicians doing the work of school inspection are meagerly paid; hence usually young men with little experience are doing this most important work. Naturally as a class, not being especially trained in eye work, these men do not understand the necessity for the use of atropin in refraction and the importance of having this necessity stated on the notice which is sent to parents. The section on Ophthalmology of the American Medical Association ought to take this matter in hand. In the above-mentioned book the use of atropin is not touched on.

The practice of school inspection in most cities is that the child is referred to the family physician for advice as to the defects found, which includes eye conditions. From 30 to 40 per cent. of all children have errors of refraction. The result is that often the parents take the child directly to an optician or possibly do so with the approval of the family physician, for many of the profession as yet do not realize the need of atropin. I know of one optician who advertises that he is especially well prepared to care for children's eyes. Only one city that I know of has attempted to combat this evil; this is Philadelphia, where the reference notice advises that the child be taken for examination to a "competent oculist (not optician)."

Would it not be a good plan for the Section on Ophthalmology to adopt resolutions covering this matter, to be transmitted to all county medical societies, and by them brought to the attention of educational and health authorities who have this matter in hand? School inspection as usually practiced at present is playing directly into the hands of the optometrist and the child suffers. As to expense, the use of atropin in the original examination would lessen much the necessity for frequent re-examinations and expensive changes of lenses. The notice sent to parents as to eye troubles should state positively that a proper examination can only be made with the use of drops, *i. e.*, atropin, and that this can be done only by a physician as distinguished from an "eye doctor." This latter term is used in some notices sent to parents. The average refracting optician loves to have the public consider him as an "eye doctor," and, in fact, he often is.

Medical literature to-day is full of articles on glaucoma, lens extraction, etc.; but of the much more common every-day work of refraction and especially of the necessity for the use of atropin in childhood, practically nothing is said. When the surgeons a few years ago found that operation was the proper treatment for appendicitis they talked and wrote us deaf, dumb and blind on the subject, but they accomplished their object. Both the profession and the public to-day recognize surgery as the proper treatment for appendicitis. Is it not time that the ophthalmologist begin a similar campaign of education as to the absolute necessity for the use of atropin in determining the refraction of the eyes of school children? Is it not our own fault that so many people believe in the work of opticians and have enabled them to secure laws by which they practically are given the legal right to practice one branch of medicine?

In the work of school inspection, reports as to efficiency or retardation of pupils should be arranged to divide those pupils having eye defects into two classes. One group would be those who have had the refraction measured with the help of atropin and are wearing the lenses prescribed after such examination, and the other group those who have had the refraction tested without a mydriatic. Such comparisons would probably be most interesting.

I should like to hear the opinions of others, and especially of ophthalmologists who either through school work or otherwise, are coming into contact with this question.

FREDERICK J. MANN, M.D., Poughkeepsie, N. Y.
Assistant Surgeon, Manhattan Eye and Ear Hospital, New York City.

Prophylactic Effect of Antitoxin on the Child in Utero

To the Editor:—The case of "Prophylactic Effect of Antitoxin on the Child *in Utero*," reported by Dr. David R. Ransom in THE JOURNAL, Feb. 13, 1909, page 556, does not prove that the child received its immunity *in utero*, inasmuch as the child was nursed by its mother while she yet suffered from the diphtheria. My meaning is illustrated by the following cases:

Mrs. A. and Mrs. B. were both nursing young babes. Both women became infected with diphtheria, having fairly severe cases. I administered antitoxin to both mothers, and allowed the babies to nurse as usual, taking no precautions, except to caution the mothers not to kiss the babies or to cough near them, etc. In neither case did the infant become infected. My conclusions were, that the babies received immunity through the mothers' milk, probably partly by means of antitoxin administered to the mothers and partly through the antibodies, which without doubt could find their way into the lacteal secretion. I have had no opportunity to study the matter beyond the two cases cited, but I have no doubt others have had similar experiences.

IRVIN HARDY, M.D., F.S.Sc.Lond.
180 Alfred Street, Kingston, Ont.

To the Editor:—In connection with the report by Dr. Ransom, the following may be of interest:

J. C., male, colored, contracted smallpox, the characteristic eruption appearing Dec. 31, 1908, three days after the onset of the usual initial symptoms. His family consisted of a 3-year-old son and the wife, who was pregnant at term. The wife and child were at once successfully vaccinated and did not contract smallpox. The woman was delivered Jan. 11, 1909, eleven days after the appearance of the eruption in the husband, who, at this time still had a few crusts. The parents refused to have the baby vaccinated, but it did not contract the disease, although no precautions were taken to prevent contact with the father; the entire family lived principally in one room.

There can be no doubt about the identity of the disease, as the symptoms and eruption were typical, and other cases have developed here, which, though mild, are unquestionably smallpox.

It seems possible that the child may have been protected by the vaccination of the mother, *i. e.*, it may have acquired vaccinia *in utero* in the way that variola is sometimes thus acquired.

C. S. NEER, M.D., Vinita, Okla.

Immunity Against Tuberculosis in General Paresis

To the Editor:—In THE JOURNAL, Feb. 13, 1909, Dr. A. J. Rosanoff, in his article on "Immunity Against Tuberculosis in General Paresis," endeavors to establish the fact that syphilis, the great causative factor in general paresis, establishes an immunity against tuberculosis.

I do not think that this can be substantiated by the facts; the immunity apparent from his statistics is in my opinion undoubtedly due to the antisyphilitic treatment to which, in the past, these patients have been subjected.

Many good authorities now think that general paresis is more directly due to the use of overdoses of mercury rather than to syphilis itself, which is a further argument for the drug origin of the immunity which Dr. Rosanoff would ascribe to syphilis. He asks: "How would the course of a case of tuberculosis be affected by a superadded syphilitic infection?"

From my own experience I answer: most disastrously, unless the patient be given antisyphilitic treatment (mercury) in which cases: any cures have been reported in this country and abroad.

B. L. WRIGHT, Surgeon U. S. Navy.

Book Notices

A STUDY OF THE OCULAR MANIFESTATIONS OF SYSTEMIC GONORRHEA, with Reports of Cases of this Nature. By W. Gordon M. Byers, M.D., Assistant Oculist, Royal Victoria Hospital. (Studies from the Royal Victoria Hospital, Montreal.) Vol. II, No. 2. (Ophthalmology 2.) February, 1909. Paper. Pp. 131. Montreal: The Herald Press.

The advanced conception of systemic gonorrhea is related to the eye in two ways: 1. While the urethra is commonly the port of entry for the gonococci, it has been shown that the conjunctiva may also serve as a point at which these organisms enter the system. 2. By metastasis the eye may be the seat of gonorrheal affections. Byers has searched the literature to gather all that has been written on the subject of gonorrheal ocular metastases and to sift the good from this material. He has added a number of cases of his own. He confesses to a certain element of disappointment at not being able to reconcile completely the conflicting opinions. He has, however, pointed out some errors and has reached conclusions which, he believes will eventually prove to be

correct. The chief of these are as follows: Systemic gonorrhea most commonly follows infection of the posterior urethra in males, through a peculiar susceptibility, the causal factors of which are not known. The evidence shows that the gonococci and not toxins or other organisms are responsible for local manifestations.

Gonorrheal metastatic ocular inflammations are irregular in time, extent and severity, and are closely associated with metastases in other parts of the body. They show a marked tendency to relapse and to recur with fresh gonorrheas. They are frequently the first, and sometimes the only, expression of systemic gonorrhea. Patients with systemic gonorrhea should be treated as those suffering from an infectious disease, and excessive use of the eyes should be avoided as favoring local manifestations.

Metastatic gonorrheal conjunctivitis is frequently initial, usually bilateral, complicated by deep-seated disease in one-third of the cases. It resembles the acute catarrhal affection, with slight, mucoid discharge. Keratitis is usually multiple, superficial, symmetrical and central. Deep-seated congestion shows interior inflammation. Pure scleroconjunctivitis should be classed by itself. In iritis the inflammation extends to the adjacent uveal tract, so that the term "iridocyclitis" would express the condition better. Although especially affecting the vascular structure, the frequency of affection of the various structures of the globe is undetermined. Gonorrheal affections of the uveal tract tend to be bilateral in first attacks, and to recur unilaterally with fresh gonorrheas. They are marked by no special features. Swellings in the iris are never observed. An associate metastatic conjunctivitis is suggestive. Purulent forms show an extraordinary tendency to recovery. Metastatic affections of the optic nerve and retina form a diffuse neuroretinitis, bilateral when uncomplicated, but unilateral if combined with uveal disease. The blood vessels are probably the route of infection. The prognosis, though guarded, is generally good. Dacryoadenitis from direct extension is unilateral and suppurates; that due to metastasis is bilateral and ends in resolution. The number of cases reported (92) and the extent of the literature referred to, impress one with the importance of a little-regarded pnase of this important subject.

SYPHILIS UND NERVENSYSTEM. NEUNZEHN VORLESUNGEN FÜR PRAKTISCHE AERZTE, NEUROLOGEN UND SYPHILIDOLOGEN. Von Max Nonne, Oberarzt am allgemeinen Krankenhaus Hamburg-Eppendorf. Second Edition. Paper. Pp. 699, with illustrations. Price, $4.80. Berlin: Verlag von S. Karger, 1909.

The first edition of this work, published in 1901, was based on lectures given by Dr. Nonne for the previous three years. The second edition is greatly enlarged and extended and brought well up to date. The form of lectures is retained. The attempt is made to base the clinical symptomatology on pathologic anatomy, but the conception of the work is a practical one, and the various subjects are illustrated largely from Nonne's own experience. Much attention is given to differential diagnosis, and the last chapter contains a review of the present status of the Wassermann reaction and other new methods of diagnosis. Considerable conservatism is shown in estimating the value of the Wassermann reaction, and the opinion is expressed that it is not pathognomonic, but must take its place among other symptoms as having diagnostic value, but as leading to reliable conclusions only when considered in connection with the entire clinical picture. All in all, the book must be regarded as a fitting exposition of the extensive relations between syphilis and diseases of the nervous system, which modern investigation has shown to exist.

HUMAN FOODS AND THEIR NUTRITIVE VALUE. By Harry Snyder, B.S., Professor of Agricultural Chemistry, University of Minnesota. Cloth. Pp. 362, with illustrations. Price, $1.25. New York: The Macmillan Co., 1908.

This book was written as a text-book for students in agricultural colleges; it is admirably fitted to their needs and the needs of laymen generally. Medical men and students will also find it interesting and instructive. It discusses neither the physiology of digestion nor diet in disease—subjects usually dealt with by physicians who write about foods and their values. In the first fourteen chapters the various kinds of foods and condiments and their composition are dealt with. The digestibility of foods, their comparative cost and value, rational feeding, water and food as affected by household sanitation and storage are in turn subjects of discussion. At the end of the book is a useful chapter describing various laboratory tests by which the composition of food and impurities or adulterations may be ascertained. The laboratory work here detailed is a valuable part of the course which this text-book covers.

THE NATIONAL STANDARD DISPENSATORY. Containing the National History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognized in the Pharmacopeias of the United States, Great Britain and Germany, with many references to other foreign pharmacopeias. In Accordance with the Eighth Decennial Revision of the U. S. Pharmacopeia, by authorization of the Convention. By Hobart Amory Hare, B.Sc., M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia; Charles Caspari, Jr., Ph.G., Pharm.D., Professor of Theoretical and Applied Pharmacy in the Maryland College of Pharmacy, Baltimore; and Henry H. Rusby, M.D., Professor of Botany and Materia Medica in the College of Pharmacy of the City of New York; with valuable assistance from Edward Kremers, Ph.D., Daniel Base, Ph.D., and Joseph F. Geisler, Ph.C., 2nd Revised Edition. Cloth. Pp. 2050, with illustrations. Price, $6.00. Philadelphia: Lea & Febiger, 1909.

The esteem in which the National Dispensatory has been held for many years will be even increased by an examination of the second edition. Everything possible seems to have been done to produce a one-volume encyclopedia of materia medica and therapeutics, suitable for the use of the medical practitioner. The volume embraces a description of the drugs and preparations of the Pharmacopeia and National Formulary and the principal non-official remedies, including the synthetics. The text of the Food and Drugs Act is given, together with the principal regulations and decisions under it. The formulas of the National Formulary in an abstracted form are introduced in the appendix. Minor drugs of local importance are described. In connection with antitoxin a good account of Ehrlich's side-chain theory is given.

THE BABY. By Daniel Rollins Brown, A.B., M.D. Cloth. Pp. 200. Price, $1. Boston: Whitcomb & Barrows.

It is stated in the preface that as many disorders of infancy are directly due to mismanagement, this little book is written for the guidance of the mother or nurse. The province of the physician is not encroached on, as Dr. Brown believes that in medicine especially a "little knowledge is a dangerous thing." The feeding of infants is given special attention, and considerable space is devoted to home modification of milk. At the same time attention is directed to the fact that even absolutely normal infants can not be fed by rule, and that special formulas are needed in many cases. Simple home remedies are given for bruises, falls, earache, etc.

ATLAS UND GRUNDRISS DER TOPOGRAPHISCHEN UND ANGEWANDTEN ANATOMIE. (Lehmann's Medizinische Atlanten, I.) Von Oskar Schultze, Professor der Anatomie in Würzburg. Cloth. Pp. 224, with illustrations. Price, 16 marks. München: J. F. Lehmann's Verlag, 1909.

An atlas must be judged by its illustrations, and from this point of view the "Atlas of Topographical Anatomy" by Schultze leaves little to be desired. The pictures are singularly clear, and in addition to the twenty-two colored plates, a large part of the illustrations incorporated in the text are also colored. The names of the various structures are given in Latin and are printed at the sides of the plates, with dotted lines leading to the part designated. The descriptive text, which is in German, is clear and concise, and to each section is appended the applications to medicine and surgery. The volume covers the anatomy of the entire body from a topographic point of view.

TUBERKULOSE-ARBEITEN AUS DEM KAISERLICHEN GESUNDHEITSAMTE, 8 Heft. Deutsche Heilstätten für Lungenkranke. Geschichtliche und statistiche Mitteilungen. IV. Mit. 8 Tafeln. Berichterstatter: Dr. Hamel, unter Mitwirkung von Dr. Friedr. Peters. Berlin: Verlag von Julius Springer, 1908.

This volume of the reports on tuberculosis put out by the German Imperial Health Office, continues the statistical review of the sanatoria of Germany and sums up the results in the concluding chapter. This summary covers the material available to the Health Office from 1896 to 1901, and includes data from over 21,000 patients.

Miscellany

The Physiology of Digestion a Century Ago.—Although some experimental work had been done on the stomach previous to the beginning of the nineteenth century, not much had been learned about the subject before the work of Dr. W. Beaumont on Alexis St. Martin in 1833. It is interesting to learn, however, that another American investigator had studied the subject of digestion experimentally thirty years before. LaFayette B. Mendel, in the *Popular Science Monthly*, February, 1909, gives an account of the thesis of Dr. John R. Young of Maryland (submitted June 8, 1803, to the medical faculty of the University of Pennsylvania), entitled "An Experimental Inquiry into the Principles of Nutrition and the Digestive Process." The example of Lavoisier incited Young to the use of the experimental method. He used frogs for the study of digestion, introducing small animals and other articles of food into the frog's stomach and removing them from time to time to observe the process. He also removed the digestive fluid from the stomach by means of a teaspoon, and made various experiments *in vitro* with it. Young was able to overthrow the theoretical assumptions of Cullen as to the nutrient principles of vegetables, which Cullen asserted to be derived from their acid, sugar and oil. Discarding the theory that acetous fermentation took place in the human stomach in a healthy state, he concluded that crescent vegetables afforded nourishment, not because of their acid, but by their sugar and oil. He found that the tissues of small animals when swallowed by the frog were softened and dissolved, even to the bones and the teeth. Vegetables were also submitted to experiments. He found that when peas, beans, wheat and bread, enclosed in linen bags, were introduced into the stomach, all these foods except the bread were still entire at the end of thirty hours; but that when the peas and beans were well bruised before introduction they were dissolved. He concluded that the living principle in the seeds resisted digestion. In harmony with this view he found that seeds would germinate when retained in the stomach. He cited an entertaining story from Morgagni of a young woman who, after a spell of violent vomiting, threw up a small plant, with perfect leaves and roots. He thought it probable "that the young lady had swallowed the seed of some small plant, without destroying its texture by mastication; which being retained in the stomach and exposed to heat and moisture, vegetation progressed." Previous teachers had assumed the occurrence of fermentation in the stomach. Young subjected this idea to experimentation. His friend, Mr. Mitchell, was made to take twelve ounces of sugar on an empty stomach, and after five hours this friend, having the power to ruminate, threw up the mass, which was sweet; "on being put to rest no intestine motion or disengagement of air was to be perceived." No vinous spirit could be obtained from it by distillation, and the subject of the experiment eructated no gas while the sugar was in the stomach, though the conditions were favorable to fermentation. Young therefore concluded against the occurrence of such a process during digestion. By other experiments he convinced himself of the non-occurrence of acetous fermentation and putrefaction in the stomach; and also of the acid character of the gastric fluid, though, his chemical tests being inadequate, he was led to conclude that the acid was phosphoric instead of hydrochloric. Our American experimenter attempted to apply to therapeutic purposes the knowledge gained, and having demonstrated that the gastric juice of the frog would dissolve urinary calculi, he proposed to employ it for that purpose by injecting it into the bladder. He says: "The fluid is easily procured and without the necessity, as in other animals, of sacrificing a life every time we wish to obtain it: by means of a teaspoon it is readily brought up from their stomachs" (where were the nostrum-makers of that day?) While leaving much of the process of digestion still obscure, the experiments of Young must be regarded as exhibiting decided progress in physiology. Notwithstanding his experimental demonstration, uncertainty regarding the acidity of the gastric juice still prevailed twenty years after Young's paper was published. Even as late as 1812 Montegre insisted that what was supposed to be gastric juice was nothing but swallowed saliva.

The Significance of Phagocytosis.—The theory of phagocytosis has played so prominent a part in recent discussions of the methods of immunity, that it seems unfortunate that it should be rendered improbable by some recent investigations. Baumgarten, in the *Münchener medizinische Wochenschrift*, July 14, 1908, expressed a regret that the interesting experimental results regarding the opsonins or bacteriotropic serum should turn the investigation of immunity into the channels of Metchnikoff's phagocytosis theory, which he regards as erroneous. While he does not deny that phagocytosis serves an important purpose in the organism by freeing it of bacteria, he concludes that the activity of the phagocytes is directed not against living bacteria capable of multiplication, but only against those which are dead or dying. The phagocytes are compared to the hyenas of the battlefield and not to the heroes of the fight. Even their power of digesting and detoxicating the dead bacteria should not, in Baumgarten's opinion, be overestimated. The organism possesses other means of accomplishing this purpose; and according to Baumgarten, investigations have shown that only a part of the bacteria are ingested by the phagocytes, while a greater part are destroyed and dissolved by the bacteriolytic powers of the serum. Hektoen, *Transactions of the Chicago Pathological Society*, Dec. 1, 1908, calls attention to the results obtained in his laboratory, which show the bactericidal effects of leucocytes *in vitro*, which appear to him to indicate that phagocytosis may be exerted against living bacteria. He calls attention to the work of G. F. Ruediger on the streptococcidal action of human leucocytes and human serum in which the presence of the leucocytes was shown to be necessary for the destruction of the bacteria. The work of E. C. Rosenow also shows that non-virulent pneumococci are destroyed by leucocytes in cooperation with serum, but not by leucocytes alone nor by serum alone. Hektoen's own experiments showed that defibrinated dog's blood destroyed virulent anthrax bacilli, which grew freely in normal dog serum and in suspensions of dog blood corpuscles freed from serum. It is to be noted, however, that the results obtained by Ruediger and by Rosenow are applicable only to non-virulent or mildly virulent streptococci and pneumococci. There is no evidence, according to Hektoen, that streptococci and pneumococci are seriously injured by human serum, in which they multiply freely; and the same is true of anthrax bacilli with regard to dog serum. Baumgarten's objections to the phagocytosis theory should be carefully considered; but it is evident from the work of Hektoen and his assistants that they are not universally applicable.

The Weighting Treatment (Belastungslagerung) in Gynecology.—The technic of the Pincus "weighting" (*Belastungslagerung*) method of treatment of gynecologic disorders, to which numerous references have been made in recent literature, as described by its originator, Pincus, in his monograph published in 1905, is substantially as follows: The essential features are the use of the inclined plane with moderate elevation of the pelvis and lower extremities and the use of compression in its various forms, abdominal, intravaginal, intermittent, continuous, direct (by application of weight or pressure in various ways) and indirect (through the tension of the internal pelvic and abdominal organs). The inclination of the plane is never as great as in the so-called "Trendelenburg position," and differs from it, moreover, in the extended position of the lower extremities. The slope can be easily arranged in private practice by raising the foot of the couch by blocks or bricks, beginning with an elevation of 8 to 16 centimeters and more according to the need. The head must be raised, best by a horsehair or air pillow, and this must also slightly raise the shoulders so as to avoid bending the neck in such a way as to hinder free circulation of blood. It is also important to remember that many nervous patients can rest easily only when the elbows and upper arm are supported in a comfortable position. Usually 20 to 35 centimeters' elevation is sufficient; the higher elevation may be useful for brief periods, but is generally need-

less and may cause headache, cramps, etc. During the night hours the foot of the couch should not be raised more than 25 centimeters. When the patients suffer from varicose veins and cramps in the legs, bandages (changed daily) may be used, but only after the blood has been emptied by raising the limbs. It is absolutely necessary to give careful attention to the condition of the skin of the thigh and avoid irritation. The second essential factor is the compression. Here we must distinguish two forms: the abdominal and the intravaginal, either of which may be continuous or intermittent. Abdominal compression may be made with shot bags (weighing from 1 to 5 kilos) or with moist clay poultices (2 to 5 kilos). Many patients prefer the latter, which covers easily a larger surface and offers the additional advantage of the effects of the moisture and some possible chemical irritation of the skin. Sand bags and other appliances have also been employed. For intravaginal compression he has made extensive use of iodoform gauze bags, somewhat larger than the lumen of the vagina, which are introduced with the patient on the inclined plane, the bowels and bladder having been previously emptied. Then 500 to 800 grams of shot are introduced, while the speculum is slowly withdrawn; the bag is then tied and pushed in, only the string being left outside. It is important in the treatment that the compression be applied gradually and also removed gradually; and this Pincus accomplishes with his quicksilver air colpeurynter, connected with a graduated glass bulb, by means of which mercury, in amount from 500 grams to 1,200 grams, can be gradually introduced while the patient is on the inclined plane, the bladder and rectum being empty, and so gradually withdrawn, while the colpeurynter bag can then be dilated with air (care being taken to avoid dangerous overdistention) and detached from the bulb when used in the ambulant treatment. The colpeurynter bag may be made cup-shaped or heart-shaped to fit the os uteri and prevent its misplacement by the latter when hypertrophied. Full details of the treatment are given in the monograph, which is profusely illustrated. The application of the vaginal tampon (*Staffeltamponade*), which in some cases is more satisfactory than the colpeurynter, is also described. The compression, abdominal and intravaginal, should be continuous in chronic conditions, if the patient is free from pain or fever. If these occur it should be intermittent. There is no fixed rule for the treatment of all cases, aside from the use of the inclined plane and the compression in its various forms. Various other gynecologic adjuvants, massage, hot irrigations, baths of various kinds, etc., may prove useful. While compression alone without the use of the inclined plane may be in many cases ineffective, the latter is by itself a valuable therapeutic measure. It quickens the circulation, both in the blood vessels and the lymphatics of the affected regions, and reduces the venous pressure in the most efficient way. It also produces a passive autotransfusion which, distinguished from the more active process induced by simultaneous compression, is often of benefit. It is from the direct intravaginal compression, however, that the greatest therapeutic effects are obtained, and the mercury colpeurynter is more effective than the other methods. As complementary measures, Pincus mentions at some length systematic respiratory exercises and carefully regulated nutrition, with due attention to the excretions, etc. The weighting treatment is more especially of value when the organs have fixed adhesions to the bony structures or other fixed points, while gynecologic massage is more especially useful when movable organs are adherent to each other. The weighting treatment loosens up bandlike adhesions and softens indurated edemas, making subsequent massage more effective, and it is further facilitated by the inclined plane position.

Noma in a Wild Animal.—Noma is of interest on account of its comparative rarity and uncertain etiology. It is now generally regarded as being infectious, the most probable infective agent being the spirillum and fusiform bacillus of Vincent, which are regarded by several investigators as different forms of the same organism. It has been noted clinically that the disease begins as an ulcerative stomatitis. C. Y. White and J. D. Blackwood (Proceedings of the Pathological Society of Philadelphia, November, 1908) have had opportunity to observe the course of a case occurring in a monkey. They found fusiform bacilli and spiral micro-organisms resembling Vincent's spirillum in the exudate and scrapings of the diseased area, there being a larger number of spiral micro-organisms than are found in the normal monkey's mouth. The histologic examination showed the presence of rod-like and thread-like organisms similar to those described by Perthes, Bruning, and others in the diseased area, being especially located in the area of advancing disease. A spiral organism resembling Vincent's spirillum in conjunction with a fusiform bacillus is found in the normal monkey's mouth. Fusiform bacilli are frequently present in small numbers in the mouths of normal monkeys. Because of their failure to isolate and cultivate the organisms, White and Blackwood refrain from asserting that the bacteria present are the cause of noma, but merely call attention to the fact that their findings are similar to those reported in a corresponding condition in human beings by others who have advanced the theory that these micro-organisms are the cause of noma or other gangrenous processes of the mouth.

Chicks from Transplanted Ovaries.—C. C. Guthrie has removed ovaries from fowls, replacing them by transplanting ovaries from other fowls (THE JOURNAL A. M. A., Oct. 17, 1908, li, 1314) and found that fowls on which this operation had been performed at first lost weight, but that during the second year their weight approached the normal. He has since reported (*Quarterly Bulletin Medical Department of Washington University*, December, 1908) that the ovaries which have been transplanted seem to function in a normal manner. The color-markings of the resulting offspring appear to be influenced by the foster-mother.

Inoculation of Street Sweepers with Plague Prophylactic.—It is stated in the *British Medical Journal* that the health officer of Kurachi has induced all the street sweepers of that sea port to allow themselves to be inoculated with Haffkine's plague prophylactic. The greater number, 1,114 out of a total of 1,206, were inoculated at the beginning of last season, and at the end of the season it was found that the mortality from plague among the uninoculated was eleven, and among the inoculated three.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish name or address will be faithfully observed.

HIGH TEMPERATURE WITH RECOVERY

To the Editor:—Please state in THE JOURNAL the highest temperature on record with recovery of the patient. W. S. W.

ANSWER.—The highest temperature on record followed by recovery is probably the case reported by John W. Teale, in the Transactions of the Clinical Society, London (VIII, page 98), in which a temperature of 122 F. was reached more than once. The case was one of severe internal injury; the patient recovered. Temperatures of 112 and 114 F. with recovery have been observed several times. Cases presenting such remarkable temperatures should be observed critically, as some patients are able to deceive an unsuspecting observer by various tricks. Our correspondent will find of interest the article on fever in Quain's Dictionary of Medicine.

DESCENDANTS OF DR. JOHN C. NOTT

To the Editor:—Can any of your readers inform me of the whereabouts of any descendants of Dr. John C. Nott, who lived in New Orleans about 1861? He was professor of anatomy in the University of Louisiana, and author of "Types of Mankind."
1319 Locust St., Philadelphia. JOSEPH LEIDY.

ECHINACEA

To the Editor:—Kindly inform me as to the real properties of echinacea. J. C. ROBINSON, Cedar, Utah.

ANSWER.—Echinacea has been claimed to have anesthetic, sialagogue, antiseptic, diaphoretic, alterative and several other properties. Like many other discarded drugs, it has failed to sustain the reputation given it by enthusiasts years ago; it is now seldom pre-

scribed under its own name. In common with numerous other little-used drugs, it is finding a place in proprietary mixtures, whose manufacturers make use of the early enthusiastic and unverified reports to endow their nostrums with remarkable therapeutic properties.

TRANSMISSION OF DISEASE BY COMMUNION CUPS

To the Editor:—Some time ago, when making a plea for the use of individual cups at communion services, I was challenged to cite specific instances in which disease was known to have been transmitted by the use of the single cup at this service. I was not able to do so. Can you or your readers furnish data?

F. E. ROSS, M.D.

2012 Peach street, Erie, Pa.

SOLUTION TO DECOLORIZE TUBERCLE BACILLI

To the Editor:—Please publish the formula for Pappenheim's solution for decolorizing the tubercle bacillus. J. P. L.

ANSWER.—Pappenheim's solution consists of rosolic acid, 1 part, dissolved in absolute alcohol, 100 parts; methylene blue is added to the point of saturation, and to this is added glycerin 20 parts.

The Public Service

Army Changes

Memorandum of changes of stations and duties of medical officers, U. S. army, week ending Feb. 20, 1909:

Truby, W. F., maj., order for duty at Army General Hospital, Fort Bayard, N. M., amended; will proceed to Fort Worden, Wash., for duty upon return from Cuba.

Reynolds, C. R., capt., relieved from duty as commanding officer, Co. C, H. C., to take effect upon the departure of that company for Fort Niagara, N. Y., about Mar. 15, and assigned to duty at the Army General Hospital, Washington, D. C.

Church, J. R., major, granted an extension of 14 days to his leave of absence.

Stedman, C. J., capt., honorably discharged from the army.

Manly, C. J., major, granted leave of absence for 10 days.

Pillsbury, H. C., lieut., relieved from duty on the transport *Buford* and assigned to duty on the transport *Logan*.

Schreiner, E. R., major, relieved from duty at the Army General Hospital, San Francisco, and ordered to Fort Walla Walla, Wash., for duty.

Vedder, E. B., capt., relieved from duty at Fort Walla Walla, Wash., and ordered to Fort Stevens, Oregon, for duty.

Love, A. G., lieut., arrived at San Francisco on the *Buford* and ordered to Columbus Barracks, Ohio, for duty.

Owen, L. J., capt., when relieved from duty at Columbus Barracks, Ohio, ordered to Fort Benjamin Harrison, Ind., for duty.

Cole, C. L., capt., when relieved from duty at Fort Benjamin Harrison, Ind., ordered to return to proper station, Fort Thomas, Ky.

Johnson, C. W., M. R. C., granted leave of absence for two months.

Stallman, G. P., M. R. C., relieved from duty in the P. D.; ordered to sail April 15 for San Francisco for orders.

Bayley, E. W., Ballard J. C., and Dade, W. H., M. R. C., relieved from duty at their present stations and ordered to duty in the P. D., sailing March 5, from San Francisco.

Hadra, Frederick, M. R. C., arrived at San Francisco on the *Buford* and ordered home to await further orders.

Bowman, M. H., M. R. C., arrived at San Francisco on the *Buford* and ordered to duty at the Depot of Recruits and Casuals, Angel Island, Cal.

Navy Changes

Changes in the Medical Corps, U. S. Navy, for the week ending Feb. 20, 1909:

Balch, A. W., P. A. surgeon, resignation accepted to take effect Feb. 20, 1909.

Stokes, C. F., surgeon, detached from the bureau of medicine and surgery, Navy Department, and ordered to the Naval Academy, Annapolis, Md.

Health Reports

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended Feb. 19, 1909:

SMALLPOX—UNITED STATES

California: Sacramento, Nov. 1-Dec. 31, 24 cases; Los Angeles, Jan. 23-30, 1 case.
Illinois: Cairo, Jan. 30-Feb. 6, 57 cases; Chicago, 2 cases; Palmyra, Dec. 25-Jan. 20, 4 cases; West Frankfort, Dec. 12-Feb. 13, 15 cases.
Indiana: Elkhart, Jan. 30-Feb. 6, 1 case; Evansville, 1 case; Fort Wayne, Jan. 23-Feb. 6, 3 cases; Indianapolis, Jan. 31-Feb. 7, 1 case; Marion, 5 cases.
Iowa: Burlington, Jan. 1-31, 1 case, imported.
Kentucky: Covington, Jan. 30-Feb. 6, 3 cases; Lexington, 5 cases.
Louisiana: New Orleans, Jan. 30-Feb. 6, 3 cases.
Maryland: Baltimore, Jan. 30-Feb. 6, 1 case.
Massachusetts: New Bedford, Jan. 30-Feb. 6, 1 case.
Missouri: Kansas City, Jan. 30-Feb. 6, 2 cases; St. Louis, Jan. 30-Feb. 2, 3 cases.
New York: Rome, Jan. 1-31, 1 case.
Ohio: Cincinnati, Jan. 29-Feb. 5, 15 cases; Dayton, Jan. 30-Feb. 6, 1 case.
South Dakota: Aberdeen, Dec. 14-Feb. 12, 40 cases.
Tennessee: Knoxville, Jan. 30-Feb. 6, 1 case; Nashville, 2 cases.
Texas: Denton county, Jan. 1-Feb. 8, 5 cases; San Antonio, Jan. 30-Feb. 6, 8 cases.
Vermont: White River Junction, Jan. 2-Feb. 10, 3 cases.
Virginia: Port Royal, Dec. 27-Jan. 14, 3 cases.
Washington: Spokane, Jan. 16-30, 4 cases, 2 imported.
West Virginia: Weston, Feb. 1, 1 case, imported.
Wisconsin: LaCrosse, Jan.30-Feb. 6, 6 cases; Milwaukee, 7 cases.

SMALLPOX—INSULAR

Philippine Islands: Manila, Jan. 2-9, 5 cases, 3 deaths.

SMALLPOX—FOREIGN

Brazil: Bahia, Dec. 5-26, 121 cases, 10 deaths; Pernambuco, Dec. 1-31, 24 deaths.
Canada: Halifax, Jan. 23-30, 4 cases; Yarmouth and vicinity, Jan. 1-Feb. 13, 28 cases.
China: Shanghai, Dec. 19-26, present.
Egypt, Alexandria, Dec. 24-31, 2 deaths; Cairo, Dec. 31-Jan. 7, 16 cases, 9 deaths.
Formosa: Dec. 12-26, 3 cases.
Great Britain: Bristol, Jan. 16-23, 2 cases, 1 death.
India: Bombay, Jan. 5-12, 7 deaths; Calcutta, Dec. 19-Jan. 2, 61 deaths; Rangoon, Dec. 26-Jan. 2, 1 death.
Indo-China: Saigon, Dec. 19-26, 1 case, 1 death.
Italy: General, Jan. 18-24, 47 cases; Calabria, Jan. 21, 15 cases; Genoa, Jan. 1-15, 2 cases; Naples, Jan. 18-24, 20 cases.
Java: Batavia, Dec. 26-Jan. 2, 2 cases.
Mexico: Mexico City, Dec. 12-26, 10 deaths; Monterey, Jan. 24-31, 3 deaths.
New Foundland: St. John's, Jan. 31-Feb. 6, 1 case; South Coast, Feb. 6, epidemic.
Peru: Lima, Dec. 31, 6 cases.
Portugal: Lisbon, Jan. 23-30, 5 cases, 1 imported.
Russia: Moscow, Jan. 2-16, 22 cases, 15 deaths; Odessa, Jan. 1-16, 6 cases, 2 deaths; St. Petersburg, Dec. 28-Jan. 9, 13 cases, 7 deaths; Warsaw, Dec. 5-19, 6 deaths.
South Africa: Capetown, Dec. 23-Jan. 2, 4 cases.
Spain: Barcelona, Dec. 19-Jan. 9, 4 deaths; Jan. 16-23, 1 death; Valencia, Jan. 19-23, 10 cases; Viga, Jan. 9-16, 1 death.
Turkey: Constantinople, Jan. 10-24, 8 cases; Smyrna, Oct. 5-Dec. 31, 53 deaths.

YELLOW FEVER

Brazil: Bahia, Dec. 5-Jan. 2, 18 cases, 8 deaths; Para, Jan. 9-16, 4 cases, 4 deaths.
Columbia: Cartagena, Jan. 7-14, 1 case, 1 death.
Ecuador: Guayaquil, Jan. 9-16, 1 death.
Mexico: Maxcanu, vicinity, Jan. 23-30, 1 case; Merida, 1 case; Veracruz, Jan. 23-2, 1 case, 1 death.
Trinidad: Jan. 16-23, 1 case, 1 death.

CHOLERA—INSULAR

Philippine Islands: Manila, Dec. 19-Jan. 2, 4 cases, 1 death; Provinces, Dec. 19-Jan. 9, 864 cases, 556 deaths.
Russia: General, Dec. 31-Jan. 7, 111 cases, 47 deaths; Jan. 12-24, 342 cases, 125 deaths; Helsingfors, vicinity, Jan. 10, 1 case; St. Petersburg, Dec. 31-Jan. 7, 96 cases, 40 deaths.
Straits Settlements: Singapore, Dec. 5-12, 11 deaths.

PLAGUE

Brazil: Bahia, Dec. 5-Jan. 2, 9 cases, 5 deaths; Pernambuco, Dec. 1-31, 4 deaths.
Egypt: General, Jan. 14-21, 3 cases, 2 deaths.
Formosa: Jan. 1-9, 1 case, 1 death.
India: General, Dec. 26-Jan. 2, 1,793 cases, 1,431 deaths; Bombay, Jan. 5-12, 9 deaths; Calcutta, Dec. 19-Jan. 2, 13 deaths; Rangoon, Dec. 26-Jan. 2, 1 death.
Indo-China: Saigon, Dec. 19-26, 4 cases, 3 deaths.
Turkey: Bagdad, Jan. 2, 3 cases.

Public Health and Marine-Hospital Service

List of changes of stations and duties of commissioned and other officers of the Public Health and Marine-Hospital Service for the fourteen days ended Feb. 17, 1909:

von Ezdorf, R. H., P. A. surgeon, granted 28 days' leave of absence from Feb. 26, 1909.

Ramus, Carl, P. A. surgeon, granted 1 day's leave of absence, Jan. 21, 1909, under paragraph 191, Service Regulations.

Ramus, Carl, P. A. surgeon, granted 3 days' leave of absence from Feb. 5, 1909, on account of sickness.

Bahrenburg, L. P. H., P. A. surgeon, granted 2 days' leave of absence from Jan. 29, 1909, under paragraph 191, Service Regulations.

Robertson, H. M., P. A. surgeon, granted 4 days' leave of absence from Feb. 23, 1909.

Collins, G. L., P. A. surgeon, granted 1 day's leave of absence, Feb. 4, 1909, under paragraph 189, Service Regulations.

Herring, R. A., asst. surgeon, granted 6 days' leave of absence from Feb. 11, 1909, under paragraph 191, Service Regulations.

Stiles, Ch. W., chief division zoology, Hygienic Laboratory, granted 1 day's leave of absence, March 16, 1909, and 6 days' leave of absence from April 5, 1909.

Branham, Henry G., acting asst. surgeon, granted 3 days' leave of absence from Feb. 9, 1909, without pay.

Dynan, Nicholas J., acting asst. surgeon, granted 29 days' extension of annual leave on account of sickness from Dec. 3, 1908, and a further extension of leave on account of sickness for 30 days from Jan. 1, 1909.

Goldsborough, B. W., acting asst. surgeon, granted 30 days' leave of absence from Jan. 1, 1909, with pay, and 2 days' leave of absence from Feb. 1, 1909, without pay.

Gastetter, A. L., acting asst. surgeon, granted 15 days' leave of absence from Feb. 6, 1909.

MacCaffey, W. B., acting asst. surgeon, granted 2 days' leave of absence under paragraph 191, Service Regulations.

Markoe, W. W., acting asst. surgeon, granted 30 days' leave of absence from Jan. 1, 1909.

Torres, Julio F., acting asst. surgeon, granted 15 days' leave of absence from Feb. 14, 1909.

Association News

An Appeal for Contributions to Aid Mrs. Carroll

At the Conference on Medical Legislation held in Washington, D. C., Jan. 18-20, 1909, resolutions were adopted providing for a committee composed of one member each from the medical departments of the Army and the Navy, one from the United States Public Health and Marine-Hospital Service, one member from the District of Columbia and one member from the Council on Medical Legislation, to present to the medical profession the conditions under which the widow of Major James Carroll is now placed, and to devise such plans as might seem advisable for her relief. The following committee was appointed: Major M. W. Ireland, U. S. A., Surgeon W. H. Bell, U. S. N., Dr. John F. Anderson, U. S. Public Health and Marine-Hospital Service, Dr. John D. Thomas, Washington, D. C., and Dr. A. S. von Mansfelde of Ashland, Neb.

Mrs. Carroll has been granted a pension of $125 a month on which to support herself, seven young children and the aged mother of her husband. The house which Major Carroll had partly paid for is mortgaged for $5,000. Since the conference adjourned, the medical officers of the Army have raised enough to pay the taxes on the house, one monthly note of $50 and the overdue interest on the first mortgage, amounting to $125. Believing that the members of the medical profession will wish to contribute toward a fund for the purpose of paying the balance due on the house, the committee requests contributions of any amount; they may be sent to Major M. W. Ireland, United States Army, Washington, D. C.

Medical Economics

THIS DEPARTMENT EMBODIES THE SUBJECTS OF ORGANIZATION, POSTGRADUATE WORK, CONTRACT PRACTICE, INSURANCE FEES, LEGISLATION, ETC.

CONFERENCE ON LEGISLATION

Annual Conference of the Committee on Medical Legislation and the National Legislative Council

The annual conference on medical legislation of the American Medical Association was held at the New Willard Hotel, Washington, D. C., January 18-20, 1909. The Monday session was called to order at 10 a. m., with Dr. Charles A. L. Reed, Cincinnati, in the chair.

Organization was effected by electing Dr. Charles A. L. Reed, Cincinnati, chairman, and Dr. C. S. Bacon, Chicago, vice-chairman. Roll-call showed twenty members present. As an appointment had been made to meet the House Committee on Inter-state and Foreign Commerce at 3 p. m., the Public Health and Marine-Hospital Service bills were first taken up. After discussion the conference endorsed S. B. 6102, provided it should be amended by reinserting the provision contained in the original Senate bill creating a bureau of water-supplies and sewage; by the insertion of a clause empowering the Surgeon-General of the Public Health and Marine-Hospital Service to enforce necessary measures for the protection of streams and water-ways from contamination and by the addition of a section authorizing the President to issue an executive order transferring and reassembling into a single department the various existing national public health agencies. S. B. 6101, the Public Health and Marine-Hospital Service Personnel Bill, was also endorsed.

The reports from the various states and services were then taken up, each representative reporting the present condition of medical legislation in his state. The conference then adjourned until 9 o'clock Tuesday morning.

NATIONAL LEGISLATION

On Tuesday, Dr. Reed, in his chairman's report, emphasized the importance of a naval medical reserve corps and the necessity of national regulation of public health. The secretary's report covered the work of the committee and the Bureau of Medical Legislation for the past year, especially the accumulation of data relating to the uniform regulation of the practice of medicine; the work on vital statistics legislation in conjunction with the United States Census Bureau and the American Public Health Association and the prospects for uniform pure food legislation.

The Committee on Navy Medical Reorganization reported, approving the bills establishing a corps of dental surgeons, authorizing a naval medical reserve corps similar to that provided for the U. S. Army and providing for the purchase and construction of hospital ships. The Committee on Special National Legislation reported the passage of the Carroll-Lazear Pension Bill.

STATE LEGISLATION

Following adjournment at 12, the conference reassembled at 2 p. m. in joint conference with the Committee on Uniform State Legislation of the Association of State and National Food and Dairy Departments. Mr. R. M. Allen of the Department of Justice delivered an address on uniform state legislation, followed by Dr. W. D. Bigelow of the Bureau of Chemistry of the Department of Agriculture. After a general discussion on the subject, the report of the Committee on Uniform State Legislation on Food and Drugs was adopted, recommending the endorsement of the model bill drafted by the committee of the Association of State and National Food and Dairy Departments.

The discussion of the report of the Committee on Uniform State Laws on Vital Statistics was opened by Dr. Cressy L. Wilbur of the Bureau of the Census, followed by a general discussion and a report of the efforts being made to secure the adoption of the model bill in the non-registration states. Following the report of the Special Committee on Revision of the Tariff, the Conference adjourned until Wednesday morning.

On Wednesday, following a general discussion of the national Food and Drugs Act and its enforcement, reports were made by the Committee on Uniform Regulation of the Practice of Medicine, the special committee for the relief of Dr. Carroll's widow, the special committee on expert medical testimony and the Committee on Federal and State Regulation of Public Health. Dr. George W. Gay of Boston presented resolutions regarding optometry which were unanimously adopted. After further discussion of the report of the Committee on Revision of the Tariff, the Conference adjourned until 1 o'clock, at which time the report of the Committee on Conclusions and Plans of Action was presented.

REPORT OF THE COMMITTEE ON CONCLUSIONS AND PLANS OF ACTION

This report endorsed S. B. 6101 and S. B. 6102, enlarging the power and authority of the Public Health and Marine-Hospital Service and providing for its personnel; endorsed the three bills relating to naval medical reorganization; recommended that the Bureau of Medical Legislation through the columns of THE JOURNAL and the *Bulletin* inform the medical profession that the United States Public Health and Marine-Hospital Service tests all vaccine matter used in interstate commerce; endorsed H. R. 24613, for the relief of the widow of Dr. William R. Miller; endorsed the work of the Bureau of Medical Legislation in securing data on which to base a uniform medical practice act; instructed the Bureau of Medical Legislation to continue its work for the adoption of a uniform vital statistic bill and expressed the thanks of the Conference to Dr. Wilbur for his constant aid and cooperation; endorsed the report of the Committee on Uniform State Laws on Food and Drugs and extended the thanks of the Conference to Mr. Allen and Dr. Bigelow; endorsed the work of Dr. H. W. Wiley of the Bureau of Chemistry; endorsed the report of the Special Committee on Expert Medical Testimony, providing for the appointment of a special committee to draft a suitable law on this subject for presentation at the next session of the conference, and endorsed the following resolutions presented by Dr. Gay regarding optometry:

Whereas, a class of opticians whose proper function consists in making and adjusting glasses as directed by an oculist, is actively seeking legislation in several states on a subject known as "optometry," legislation which will in effect give them the sanction of the state to examine eyes and to prescribe for the same, and

Whereas, the qualifications usually required in these petitions for such legislation are entirely inadequate to justify the state in conferring such important privileges upon any class of people, and

Whereas, the bills presented to the various legislatures for enactment will not prevent the so-called "optometrist" from practicing ophthalmology, one of the most important branches of medical work, and

Whereas, such action on the part of the state will tend to elevate a trade, devoid of the essential qualifications, to the dignity and importance of a profession in the minds of the public, and

Whereas, the result of such license will doubtless be to establish a class of uneducated and poorly qualified oculists, to the great detriment of the public health, now, therefore, be it

RESOLVED, that in the opinion of the Committee on Medical Legislation, and of the National Legislative Council of the American Medical Association in conference assembled, the granting of such a license to opticians will do great harm to the public by reason of the fact that it gives to persons, who are ignorant of the fundamental principles of diagnosis, ignorant of the profound relation that may exist between ocular fatigue and serious neurologic disturbances, as well as of the many deep-seated, intraocular affections of the eye, the sanction of the state in their attempts to do the work, which should only be done by properly educated and duly qualified physicians.

RESOLVED, that in the opinion of the American Medical Association, as represented by this conference, the efforts of the self-styled optometrists to obtain such legislation should be discouraged and opposed in every legitimate manner and on all proper occasions.

After the adoption of this report the conference adjourned. (A full report of the Conference with minutes of the session will appear in the March number of the *Bulletin of the American Medical Association.*)

Dr. McCormack Addresses Missouri and Kansas Legislatures

Dr. J. N. McCormack addressed the Missouri state legislature at Jefferson City February 18 by special invitation and the Kansas legislature February 23. Arrangements for other joint sessions are being made and similar addresses will probably be given before the legislatures of South Dakota and Iowa. In the first two weeks of February Dr. McCormack also spoke before joint sessions of the legislatures of North Carolina and Indiana. The fact that a joint resolution was adopted by the Missouri legislature asking for an address before a joint session is particularly interesting as showing the increasing attention given to public health measures by our state legislatures.

Proposed Medical Legislation

ILLINOIS

S. B. 67 is to provide "humane and scientific treatment and care for the dependent wards of the state; to provide delinquents and prisoners with such training as will restore the largest possible portion of them to useful citizenship; to study the causes of dependence and delinquence with a view to ultimate prevention, and to secure the highest attainable degree of economy in the business administration of state institutions." This bill, one of the most important introduced in the legislature for years, provides for centralized administration, inspection, criticism and recommendation. The administration of the twenty state charitable, correction and penal institutions is to be placed in the hands of a paid board of three men, while the inspection and criticism of the institution is to be done by a non-salaried board of seven persons. The administrative board is to be appointed by the governor to serve during good behavior, each member to receive a salary of $7,500. One member must be experienced regarding the cure and treatment of insane, feeble-minded and epileptic, one member regarding charities and children and one member regarding the care and correction of delinquents and criminals. The board is to be authorized to employ a fiscal supervisor at a salary of $10,000 and expenses. All existing boards of trustees, managers and commissioners of the various institutions, at present numbering 72 persons, are abolished. The business management of all state institutions is to be centralized in one office with one purchasing agent for all. The fiscal supervisor and the managing officers of all the state institutions are to be constituted a board of joint estimate, to meet at least annually. This board is to elect a standing purchasing committee, of which the fiscal supervisor is to be a permanent member. The purchase of all supplies is to be by competitive bidding, the managing officer of each institution making monthly requisitions on the fiscal supervisor for all supplies, material, salaries, etc. The funds appropriated for state institutions are to be placed in the hands of the state treasurer, local treasurerers being abolished. The board of administration, therefore, is not to handle a single dollar of actual money, all bills being paid by warrants on the state treasurer. The names of all state asylums are to be changed to "state hospital." Civil service reform rules are to be extended to all employés of all state institutions, including superintendents and wardens, and to all employés of the board of administration and the board of charities and correction, the fiscal supervisor being the only employé of the board of administration exempt. The present Board of Charities Act, the Complete State Care Act and the Prison Industries Act are to be repealed, being covered by the proposed arrangement.

This bill has been carefully drafted after the collection of expert opinions from authoritative sources in this country and Europe. It represents an earnest effort to take the management of state institutions of all kinds out of the hands of the professional politician and ringster, to substitute business management and economy for slipshod and irresponsible methods and to manage state business affairs as they would be managed by a private corporation, made up of capable and farsighted business men. The only possible objections to the bill are those raised by ward politicians of the old school, who will doubtless object to having their patronage taken out of their hands.

INDIANA

H. B. 258 is to empower cities to pass ordinances regulating sewage systems. H. B. 308 is a most comprehensive bill, similar to the Nebraska bill, providing for the regulation of all places in which foods are prepared, manufactured, packed, stored, sold or distributed. H. B. 44 is to give the state board of health authority over all water-supplies, water-systems, sewage-systems, purification plans, etc., in the state.

MICHIGAN

The report of the Committee on Legislation of the Michigan State Medical Society shows that the bill providing for a board of examiners for nurses, introduced into the last legislature, will also be presented at the present session. The committee endorses the principles of the bill, but insists that the registration of nurses should be in the hands of the state board of medical registration rather than in the hands of a separate and independent board. An optometry bill has been introduced, but its passage is not anticipated.

MINNESOTA

H. F. 169, a bill to prohibit certain classes of medical advertising, which was referred to the Committee on Public Health, has been reported on favorably and passed by the house.

NEW HAMPSHIRE

H. B. 395 provides for the registration of all cases of tuberculosis and for the prevention of the spread of the disease. H. B. 425 is to regulate the manufacture and sale of cigarettes. H. B. 432 is to add to the existing definition of the practice of medicine "the public assumption or advertising of any title showing or tending to show that the person is a practitioner of medicine in one or more branches. Christian Scientists or other practitioners who claim to cure disease by prayer or mental treatment alone without the use of medicine and without performing any physical act whatever are exempt providing they do not ask or receive any money or other kind of value as compensation." H. B. 433 is to authorize physicians not regularly in attendance on patients to issue death certificates.

H. B. 446 is to amend the public health laws regarding sewage. H. B. 481 is to regulate the licensing and registration of physicians and H. B. 520 is to amend the food and drugs act of 1907.

NORTH CAROLINA

A bill has been introduced to amend the medical practice act by providing for "limited license," authorizing the holders thereof to practice medicine and surgery within the limits of a specific district, this being considered advisable on account of

the sparsely settled condition of parts of the state. A bill has also been introduced providing for the registration of deaths in towns of over 1,000 population. Other bills provide for the distribution of diphtheria antitoxin to indigent persons, for the appropriation of $30,000 for a state sanatorium for tuberculosis and for the amendment and modification of existing laws regarding the state board of health, state board of medical examiners and the state laboratory of hygiene.

NORTH DAKOTA

S. B. 131 is to create a state board of osteopathic examiners and is similar in general to the bills for this purpose introduced into other state legislatures.

SOUTH DAKOTA

S. B. 190 is to prohibit the advertising of the treatment of venereal diseases in any newspaper, pamphlet or circular. H. B. 217 is to establish a board of examiners in optometry and is similar to the bills along this line introduced into other states. H. B. 189 is a pure food bill. H. B. 282 is to amend the existing laws regarding county boards of health.

TENNESSEE

S. B. 177 is to regulate the practice of medicine and surgery and is a practically new medical practice act for the state. It provides for a state board of medical examiners of 6, 2 from each grand division of the state, 4 representatives from the "regular" school of medicine and 1 each from the eclectic and homeopathic. No member of the board shall be connected with any medical college or with the state board of health. Members of the board are to be appointed by the governor. Licenses issued by the board must be registered in the office of the county clerk. The board is given the power to revoke licenses for fraud or unprofessional or dishonorable conduct which is explicitly defined under seven heads. An amendment provides that nominations shall be made by the three state medical associations, each of which shall name twice as many names as are to be appointed, from which list the governor shall select his appointees.

TEXAS

S. B. 50 is to provide for the erection and maintenance of a state sanatorium for tuberculosis. This bill has been reported on favorably by the committee on public health and has been advanced to third reading in the senate. An optometry bill introduced into the house is still in committee. A bill to exempt graduates of the medical department of the state university from examination has been reported favorably in the senate and unfavorably in the house; it probably will not pass. The bill creating a state board of health has been reported favorably in the senate.

WISCONSIN

S. B. 74 is an optometry bill. S. B. 139 is to amend the housing act of the state. S. B. 85 is to provide for sanitary conditions in hotels. H. B. 56 is to amend the existing statutes regarding tuberculosis. H. B. 139 is to amend the existing law regarding vital statistics.

POSTGRADUATE COURSE FOR COUNTY SOCIETIES

DR. JOHN H. BLACKBURN, DIRECTOR
BOWLING GREEN, KY.

[The Director will be glad to furnish further information and literature to any county society desiring to take up the course.]

Seventh Month—Fourth Weekly Meeting

DYSTOCIA (Continued)

DUE TO ACCIDENTS AND DISEASES

PREMATURE SEPARATION OF NORMALLY IMPLANTED PLACENTA—Etiology, pathology, indications in treatment.

PLACENTA PRÆVIA—Frequency, varieties, diagnosis, differentiation.

POSTPARTUM HEMORRHAGE.—Etiology: (1) Traumatic, lacerations of cervix, vagina, vulva. (2) Non-traumatic, (a) partial separation of placenta, and inefficient pains, before its expulsion; (b) hemophilic dyscrasia; (c) atony of uterus, (1) exhaustion from long labor, (2) diseased muscle (metritis, fibroids, etc.), (3) excessive distention (twins, hydramnios), (4) anesthetic, (5) paralysis of placental site. Etiologic diagnosis, "concealed hemorrhage." Treatment: Physiologic and therapeutic action of ergot. Local treatment: Posture, stimulants, saline solution.

INVERSION OF UTERUS.—Rarity, etiology, spontaneous and from violence. Treatment.

ADHERENT PLACENTA.

INJURIES TO BIRTH CANAL

VULVAR AND PERINEAL LACERATIONS.—Prevention. Treatment; primary and secondary operations, results.

LACERATIONS OF CERVIX.—Frequency, extent, shape, location, dangers.

RUPTURE OF UTERUS.—(a) During pregnancy. (b) During labor; etiology and pathology; contraction ring, lower uterine segment; spontaneous, obstructed labor, malpresentations, hydrocephalus, malformation of uterus; artificial or violent, version, forceps; complete and incomplete rupture. Diagnosis. Prognosis, mother, child.

OBSTETRIC OPERATIONS

TECHNIC PREPARATION for all operations.

ACCOUCHEMENT FORCÉ.—Indications. Methods: (1) Manual dilatation. (2) de Ribes' balloon. (3) Instrumental dilatation. (4) Deep cervical incisions. (5) Vaginal Cesarean section.

FORCEPS.—History of forceps. Indications and application in occipito-posterior positions.

EXTRACTION.—Indications. Technic, manual method. Use of forceps, fillet, blunt hook.

VERSION.—1. Cephalic; indications, methods, technic. 2. Podalic; indications, conditions, technic of internal, of combined.

MONTHLY MEETING

Causes and Treatment of Postpartum Hemorrhage.
The Abuse of Forceps.
Indications for Cesarean Section.

Medical Education and State Boards of Registration

COMING EXAMINATIONS

CONNECTICUT HOMEOPATHIC: New Haven, Mar. 9. Sec., Dr. Edwin C. M. Hall, 82 Grand Ave.

CONNECTICUT ECLECTIC: New Haven, Mar. 9. Sec., Dr. T. S. Hodge, Torrington.

CONNECTICUT REGULAR: New Haven, Mar. 9-10. Sec., Dr. Charles A. Tuttle, 196 York St.

MAINE: Portland, Mar. 9-10. Dr. W. J. Maybury, Saco.

MASSACHUSETTS: Boston, Mar. 9-11. Sec., Dr. Edwin B. Harvey, Room 159, State House.

Higher Entrance Requirements at Western Reserve

Since October, 1901, Western Reserve University has required the completion of the junior year in a recognized college of liberal art for entrance to the medical department. It is now announced that, beginning in October, 1910, for unconditional entrance, a degree of A.B., B.S., Ph.B., Litt.B., or equivalent will be required, and that the work for the obtaining of such degree must have included inorganic chemistry, physics, biology and Latin, such as would be obtained by satisfactory completion of the following courses:

A. Inorganic chemistry, including qualitative analysis, as represented by a course containing at least five actual hours per week through one collegiate year, of which at least one-third shall be laboratory work.

B. Physics, as represented by a course of at least three actual hours per week for one-half collegiate year, of which at least one-third shall be laboratory work.

C. Biology (botany or zoology or a combination of these), as represented by a course of at least three actual hours per week for one-half collegiate year, of which at least one-third shall be laboratory work.

D. Latin of at least one year's work, as represented by Latin grammar and the reading of four books of Cæsar, or equivalent.

Conditional entrance will be granted on the completion of the junior year in an approved college or scientific school, in-

cluding the subject requirements above mentioned, on condition that the student obtain his baccalaureate degree before he enters the third year of the medical course.

Maryland December Report

Dr. J. M. Scott, secretary of the Maryland Board of Medical Examiners, reports the written examination held at Baltimore December 8-11, 1908. The number of subjects examined in was 9; percentage required to pass, 75. Of the 53 applicants who were examined 15 participated in the examination for the first time, and of these 12 were successful. Twenty-seven applied for re-examination in branches in which they had previously failed; of these 12 were successful, working off all branches. Primary examinations require a general average of 75 per cent. Those re-examined are required to make 75 per cent. in each branch. Nine reciprocal licenses were granted at this meeting and two candidates were licensed under the exemption clause. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University	(1908)	75, 86, 87
Baltimore Medical College	(1905)* (1907)* (2, 1908)*	(1908) 84
College of Physicians and Surgeons, Baltimore,	(1906) 86; (1907)* (1908)*	(1908) 94
Maryland Medical College	(2, 1907)*	
University of Maryland	(3, 1908)*	(1908) 78, 85
Johns Hopkins University	(1908)	85
Jefferson Medical College	(1907)* (1907) 93;	(1908) 75
University of the South	(1908)	76

FAILED

Howard University, Washington	(1908)	70
University of Maryland, (2, 1904)* (2,1907)*	(1908)*	(1908) 67
Maryland Medical College	(1906)* (2, 1908)*	
Baltimore University	(1907)*	
College of Physicians and Surgeons, Baltimore	(1904)*	
Baltimore Medical College	(1905)* (2, 1906)*	(1907)*
Long Island College Hospital	(1905)*	
University of the South	(1908)	66

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
Howard University	(1903)	W. Virginia
Georgetown University,	(1891) Dist. Columbia; (1897)	Iowa
Rush Medical College	(1883)	Wisconsin
College of Physicians and Surgeons, Chicago	(1905)	Illinois
University of Maryland,	(1904) West Virginia; (1907)	Georgia
College of Physicians and Surgeons, Baltimore	(1908)	W. Virginia
University of Virginia	(1902)	W. Virginia

LICENSED UNDER EXEMPTION CLAUSE

College	Year Grad.
University of Maryland	(1880)
University of Pennsylvania	(1890)

* Re-examined. No percentage assigned.

Ohio December Report

Dr. George H. Matson, secretary of the Ohio State Board of Medical Registration and Examination, reports the written examination held at Columbus, Dec. 8-10, 1908. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 34, of whom 32 passed and 2 failed. Eleven reciprocal licenses were issued. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University	(1908)	91
Rush Medical College	(1908)*	
American Medical Missionary College	(1902)	82
Kentucky School of Medicine	(1908)	83
University of Louisville	(1908)	81
College of Phys. and Surgs., Baltimore	(1907) 76; (1908)	85
Baltimore Medical College	(1907)	88
Tufts College Medical School	(1908)	79
University of Michigan	(1908)	90
Ensworth-Central Medical College	(1899)	81
University and Bellevue Hospital Med. Coll.	(1903)	89
Long Island College Hospital	(1908)	85
Ohio Medical University	(1898)	88
Cleveland Homeopathic Medical College	(1908)	75
Pulte Medical College	(1892)	77
Toledo Medical College	(1908)	79
Columbus Medical College	(1880)	79
Miami Medical College	(1908)	85
Eclectic Med. Institute, Cincinnati	(1906) 78; (1908)	82, 88, 88
Western Reserve University	(1908)	77
Cleveland College of Physicians and Surgeons	(1908)	77, 82
Woman's Medical College of Pennsylvania	(1908)	85
Jefferson Medical College	(1908)	84
University of Virginia	(1904)	90
University of Toronto, Canada	(1907)	91
University of Prague, Austria	(1904)	89
National University, Athens, Greece	(1899)	81

FAILED

College	Year Grad.	Per Cent.
College of Physicians and Surgeons, Chicago	(1906)	72
Meharry Medical College	(1908)	69

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
Rush Medical College	(1906) (1908)	Illinois
Indiana Medical College	(1906)	Indiana
College of Physicians and Surgeons, Baltimore	(1905)	Maryland
Johns Hopkins Medical School	(1907)	Maryland
Baltimore Medical College	(1908)	Maryland
Detroit College of Medicine	(1908)	Michigan
University of Michigan, Homeopathic Dept.	(1908)	Michigan
Syracuse University	(1907)	New York
University and Bellevue Hospital Med. Coll.	(1908)	New York
Long Island College Hospital	(1908)	New York

* No grade given.

Marriages

FORREST GABBERT, M.D., to Miss Virginia Wood, both of Louisville, Ky., February 3.

HOWARD FORCE, M.D., Ludington, Mich., to Miss Francis M Penton of Detroit, February 2.

EUGENE L. PESSAGNO, M.D., Baltimore, to Miss Mary L. Everly, at Baltimore, February 11.

SCOTT GOODPASTER, M.D., Cincinnati, Ohio, to Miss Katherine Rice of Owingsville, Ky., February 24.

JOHN T. POWERS, M.D., Osceola, Wis., to Miss Bessie Erema Rosenquist of Ladysmith, Wis., recently.

JOHN RAYMOND BARBER, U. S. Army, to Miss Faith Constance Woodward, at Washington, D. C., February 5.

Deaths

William Tillinghast Bull, M.D., the famous surgeon of New York, died at Wymberly, Isle of Hope, near Savannah, Ga., from cancer of the neck, February 22, aged 59. He was born in Newport, R. I., May 18, 1849; was graduated from Harvard with the degree of A.B. in 1869, received his degree of medicine from the College of Physicians and Surgeons in the City of New York, 1872; and after an interneship in Bellevue Hospital and two years' study in Europe, settled for practice in New York City. He was in charge of the New York Dispensary from 1875 to 1877; of the Chambers Street Hospital in 1877 and 1878; had been visiting surgeon of the New York Hospital since 1883; visiting surgeon of St. Luke's Hospital from 1880 to 1883, and since that time consulting surgeon of the institution; consulting surgeon to the Hospital for the Ruptured and Crippled, Roosevelt, Womans' hospitals, and to the State Emigrants' Hospital. He began his teaching work in his alma mater in 1879 as demonstrator of anatomy, and was made professor of practice of surgery and clinical surgery in 1889. He was a member of the American Medical Association, a fellow of the American Surgical Association and of the New York Academy of Medicine, and a member of many other scientific societies. He was highly esteemed by the medical profession of his state and the United States, not only because of his skill as a surgeon, but because of his sound judgment and the zealous application which he gave to his cases. Dr. Bull was a frequent contributor to the medical literature. For several months he had been ill with cancer of the neck and made a brave fight for life, using all the methods of treatment known to science, but without avail. On January 29 he started for Georgia in the hope of being benefited by the milder climate, but improvement was only temporary and he gradually failed and died, the immediate cause of his death being edema of the lungs.

George Osborn Morgridge, M.D. College of Physicians and Surgeons, Keokuk, 1870; State University of Iowa, Iowa City, 1875; a veteran of the Civil War; for fifteen years a member of the board of education; and for several terms its president; formerly a member of the faculty of the Kansas Medical College, Topeka, and local surgeon of the Santa Fe system; a member of the Muscatine County Medical Society; died at his home in Muscatine, from heart disease, February 11, aged 69.

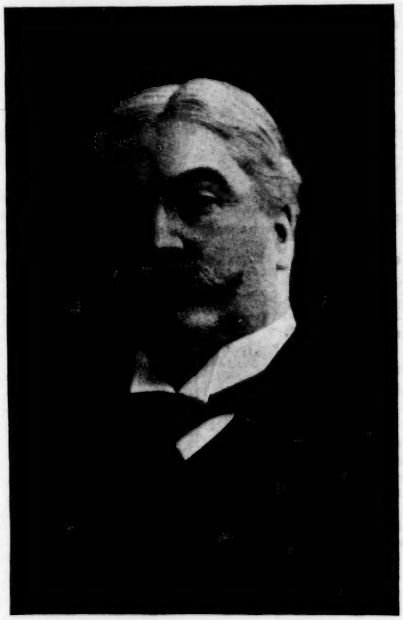
John W. Ramsay, M.D. Jefferson Medical College, Philadelphia, 1863; regimental and division surgeon in the Confederate service during the Civil War; sometime president of the West Virginia State Medical Association, and Harrison

County Medical Society; local surgeon for the Baltimore and Ohio Railroad; and a director for the West Virginia Hospital for the Insane, Weston; died in his apartment in Clarksburg, February 4, from senile debility, aged 76.

Morgan L. Woodruff, M.D. Long Island College Hospital, Brooklyn, 1878; a member of the Massachusetts Medical Society; formerly president of the Berkshire District Medical Society; from 1884-1897 a member of the Pittsfield board of health and for several years town physician; visiting surgeon to the House of Mercy Hospital, Pittsfield; was killed February 11, by the derailment of an electric car in Pittsfield, Mass., aged 56.

Elmo Allen Hall, M.D. Denver (Colo.) College of Medicine, 1901; a member of the American Medical Association, and Wyoming State Medical Society; for two years medical director of the State Hospital for the Insane, Evanston, Wyo.; surgeon for the Treadwell Mining Company, and local surgeon for the Santa Fe System at Mayer, Ariz.; died in that place, February 1, aged 30.

John Thomas Fritts, M.D. Bellevue Hospital Medical College, New York City, 1866; formerly a member of the American Medical Association; for more than thirty years local surgeon at Plainfield, N. J., to the New Jersey Central R. R., and for several years surgeon to the Public Service Corporation; died at his home February 8, from edema of the lungs, aged 63.



WM. T. BULL, M.D., BORN MAY 18, 1849, DIED FEB. 22, 1909

John Campbell, a veteran of the Civil War; for more than half a century a practitioner of medicine; from 1885-1889 medical referee in the Pension Bureau, Washington, D. C.; and thereafter district inspector in Philadelphia, of the Equitable Life Assurance Company of New York; died at his home in Philadelphia, February 4, from pneumonia, aged 80.

Eleanor Galt Simmons, M.D. Womans' Medical College of Pennsylvania, Philadelphia, 1879; a member of the American Medical Association; died at her home in Cocoanut Grove, Fla., February 2, from tuberculosis of the brain, aged 55. At a special meeting of the Dade County Medical Society, resolutions of regret and sympathy were unanimously adopted.

George Luther Nye, M.D. Medical College of Virginia, Richmond, 1869; formerly vice-president of the West Virginia State Medical Association; acting assistant surgeon of the Forty-fifth Virginia Infantry, Confederate States of America, during the Civil War; owner of the Nye Lithia Springs near Wytheville, Va., died at his home near Hurricane, W. Va., February 4, aged 67.

Joshua M. Cooper, M.D. Jefferson Medical College, Philadelphia, 1868; one of those whose homes were destroyed in the Johnstown flood; a member of the Medical Society of the State of Pennsylvania; censor of the Medico-Chirurgical College of Philadelphia; consulting physician to the Meadville City Hospital; died at his home February 11, aged 64.

William J. Sullivan, M.D. Starling Medical College, Columbus, Ohio, 1853; assistant surgeon of the Ninety-sixth and the One Hundred and Thirty-second Ohio Volunteer Infantry and later division surgeon during the Civil War; an honorary member of the Champaign County Medical Society; died at his home in Urbana, Ohio, February 13, aged 84.

William A. Whayne, M.D. University of Louisville (Ky.), 1890; of Pueblo, Colo.; a specialist on diseases of the eye, ear, nose and throat; chief ophthalmic surgeon of the Texas S. S. and S. Railroad; and formerly ophthalmic surgeon to the Nashville, Chattanooga and St. Louis R. R. at Paducah; died in Pueblo, from pneumonia, February 9, aged 44.

William S. Cannon, M.D. Medical College of Georgia, Augusta, 1860; surgeon in the Confederate service during the Civil War; local surgeon of the Carolina and Western R. R.; member of the American Association of Life Insurance Examining Surgeons; died at his home in Ellenton, S. C., February 3, aged 73.

John Bailey Mullins, M.D. University of Maryland, Baltimore, 1887; a member of the American Medical Association and the American Society of Laryngology and Otology; formerly of Norfolk, Va.; died at his home in Washington, D. C., from cerebral hemorrhage, February 11, aged 42.

Alexander F. Wills, M.D. Jefferson Medical College, Philadelphia, 1856; a member of the Medical Society of Virginia; physician to the Amherst county almshouse; for a time a member of the board of supervisors of the county; died at his home in Clifford, February 4, aged 75.

Abner G. McGrew, M.D. State University of Iowa, Iowa City, 1876; a member of the Nebraska State Medical Association; and of the National Association of Railway Surgeons; died at his home in Geneva, February 10, from pneumonia, aged 71.

James H. McCaleb, M.D. Tulane University, New Orleans, 1888; of Gonzales, Texas; a member of the State Medical Association of Texas; died in a sanitarium in San Antonio, February 3, two days after an operation for appendicitis, aged 46.

James Alvin Van Winkle, M.D. Starling Medical College, Columbus, Ohio, 1893; a member of the American Medical Association and a prominent practitioner of Greene county, Ohio; died at his home in Spring Valley, February 11, aged 44.

John Jay Piper, M.D. Indiana Medical College, Laporte, 1849; for three terms a member of the board of county commissioners of Spokane county, Wash.; died at his home in Spokane, June 18, 1908, from organic heart disease, aged 77.

Anthony H. Bryan, M.D. University of Louisville (Ky.), 1857; an honorary member of the Indiana State Medical Association; died at the home of his son in Evansville, February 8, from senile debility, aged 76.

Richard J. Trippe, M.D. Atlanta (Ga.) Medical College, 1882; of Cartersville, Ga.; a member of the American Medical Association; died in a sanitarium in Atlanta, February 9, from erysipelas, aged 47.

Harry Clifford Secrist, M.D. Miami Medical College, Cincinnati, 1881; died in his apartment in Moline, Ill., February 4, from the effects of formaldehyd, said to have been taken with suicidal intent, aged 58.

Hjalmar Nyvall, M.D. Cleveland Homeopathic Medical College, 1896; died at his home in Cleveland, February 3, from laryngeal tuberculosis, aged 51.

Alden Woodbridge Brown, M.D. Eclectic Medical College of Maine, Lewiston, 1885; died at his home in Salem, Mass., February 9, aged about 70.

John Frank Thornton, M.D. Chattanooga (Tenn.) Medical College, 1894; of Witting, Texas; died at Hallettsville, Texas, Dec. 1, 1908, from gastritis, aged 36.

Albert Franklin Sherman, M.D. Chattanooga (Tenn.) Medical College, 1898; died at his home in Avondale, Chattanooga, February 5, aged 54.

Christopher P. Gerrish, M.D. Medical School of Maine, Brunswick, 1855; died at his home in South Berwick, Maine, February 2, aged 79.

John Clarence Cutter, M.D. Harvard Medical School, Boston, 1877; died at his home in Worcester, Mass., February 2, from paralysis, aged 57.

Richard R. Sigler, M.D. University of Louisville, Ky., 1882; died at his home in Ramsey, Ind., February 7, from pneumonia, aged 70.

Frank Hoxie, M.D. Long Island College Hospital, Brooklyn, 1877; died at his home in Union Springs, N. Y., February 5, aged 55.

George Fox, M.D. Geneva (N. Y.) Medical College, 1852; of Caledonia, Mich.; died January 27, from senile debility, aged 87.

Julian A. Buell (license, Mich., 1900); since 1866 a practitioner of Franklin, Mich.; died at his home, February 3, aged 69.

Society Proceedings

COMING MEETING

Medical Society of the Missouri Valley, St. Joseph, Mar. 18-19.

PHILADELPHIA NEUROLOGICAL SOCIETY

Regular Meeting, held Jan. 22, 1909

The President, DR. J. W. MCCONNELL, in the Chair

Morbid Sleepiness

DR. T. H. WEISENBURG: The patient, a woman aged 32, with an excellent family and past history, was raised on a farm and all her life had been accustomed to rising at 4:30 in the morning and going to bed about 7 at night. At the age of 16 it was first noticed that she had a tendency to sleep at all hours of the day. For instance, she would rise in the morning and directly after breakfast would put her head down on the table and go to sleep, this continuing until some one woke her. This condition has persisted ever since, or for sixteen years. At one time for a period of about three years she would even go to sleep while on her feet; she would hang her head to one side and then would sink into a chair and sleep until some one would waken her. The sleep would last indefinitely unless she was awakened. Within the last three years she has grown somewhat better. Examination showed a young woman, well built, with rather large features, skin of normal tension and nutrition. There was some mild refractive error which has been corrected by glasses. Examination did not demonstrate any so-called neurasthenic or hysterical stigmata. The reflexes were normal and no discoverable neurologic symptoms were found. The thyroid was not enlarged and there was no suggestion of myxedema or acromegaly. Urine and blood examinations were negative. The patient was placed on static electricity and suggestive treatment, the course of her daily routine was changed and she has improved very much and now bids fair to become cured of her disease. While a morbid sleepiness in neurasthenic and hysterical persons and in some forms of brain tumor is not uncommon, it is rather unusual for a condition to have persisted for sixteen years and then yield to treatment in the short period of two weeks. Another rather interesting feature of this case has been that for many years the patient was not able to laugh audibly. She is of a cheerful optimistic disposition, and while she would smile she could not laugh. She is now able to laugh like any other person.

DISCUSSION

DR. H. CARNCROSS: Recently, I saw at the Polyclinic a woman who would go to sleep at any time during the day. She went to bed at 6 o'clock in the evening and did not arise unusually early in the morning. She was extremely melancholy and had no desire to do anything.

DR. F. X. DERCUM: Probably all physicians have seen patients with sleep disturbances approximating those in Dr. Weisenburg's case, but I do not recall having seen a patient who slept as much as this one. I had a young mulatto woman under my care who fell asleep under all sorts of conditions and circumstances and who proved to be suffering from myxedema. She improved greatly under thyroid extract. However, in cases which are purely psychic, as Dr. Weisenburg's appears to be, thyroid extract might answer the purpose. It might be given in doses large enough to keep the patient awake, beginning with small doses and gradually increasing until some effect was achieved.

DR. T. H. WEISENBURG: Dr. Dercum's suggestion is a good one, and I shall act on it. The case is probably psychic, because with only two weeks' treatment I have been able to keep the patient awake nearly all day. I am giving her small doses of caffein and using suggestive therapeutics almost entirely. Instead of getting up at 4:30 she gets up at 6 or 7 o'clock and goes to bed at a decent hour.

A Brain with Extensive Unilateral Softening

DR. A. C. BUCKLEY read the notes of this case: The brain was that of a woman, aged 47, who had suffered from valvular heart disease for about two years. About four months before her death she suddenly lost the use of the right arm and became aphasic. Her spontaneous speech was limited to a few simple expressions as "good morning," "I can't see" (meaning "speak"), "yes," "no"; she named key, pencil, table, chair. To pronounce words was often an effort. Spoken language was apparently well understood, and she could read to herself and could promptly detect mistakes when words shown to her were read wrongly aloud by others. She could recognize objects and could indicate their use, though unable to name them. She could copy printed words, and was able to arrange cardboard letters to form words, both being done with the left hand; there was inability to write the name of object dictated. The case appeared to be one of the motor type of aphasia. Pathologically, there was a rather extensive softening, chiefly confined to the lower part of the central convolution, anterior to the central fissures, Broca's convolution appeared to have escaped. Posterior to the central fissure there was no softening of the ascending gyrus, but the inferior parietal was largely included in the process. The anterior end of the temporal lobe was also softened. The absence of auditory symptoms was doubtless to be explained by the fact that the softening in the temporal bone was evidently of much more recent occurrence than in the other areas, and that it occurred during the last week of life, when, on account of the attack of cardiac failure, it was impossible to examine the patient for word deafness.

DISCUSSION

DR. F. X. DERCUM: This is an interesting and important specimen because of the findings of the lack of involvement, at least so far as surface indications go, of the third frontal convolution. It appears as if the occlusion had taken place posterior to the branch which supplies the third frontal convolution, and that the patient had had a motor aphasia plus the sensory phenomena which are usually present.

Optic Neuritis Associated with Disease of the Frontal Sinus and Ethmoidal Cells

DR. SAMUEL D. RISLEY: It should be remembered that the mucous membrane lining the interior of the nose is continuous through narrow drainage canals with the lining "mucoperiosteum" of all the accessory sinuses. These sinuses are likely, therefore, not only to participate in the infectious diseases of the nasal membrane, but by their anatomic situation are removed from any favorable opportunity for natural protection by the usual methods of increased secretion and free drainage. The intimate anatomic connection of the inflamed membrane lining the thin bony walls of these cavities; the frequent lapses in the bony continuity of their walls; the network of sutures which in adult life unite the different centers of ossification; the numerous foramina for the passage of nerves, arteries, veins and lymph channels, all give opportunity for the migration of infectious products to contiguous tissues. Since the walls of these sinuses form so large a part of the walls of the orbit, it is not cause for surprise that the contents of the orbit are liable to invasion. Disease of the

sinuses does extend to the orbital tissues, leading to abscess of the orbit and even to severe optic neuritis. In one case there was orbital abscess with optic neuritis, contracted field, swollen papilla and vision reduced to 1/5. The order of events in the history was complete blocking of the upper nasal fossa with polypoid mass and hypertrophy of the middle turbinate, purulent infection of right frontal sinus, partial drainage into the antrum of Highmore, necrosis of the floor of the frontal sinus and extension to the orbit, proptosis of the eyeball, optic neuritis, complete relief and restoration of normal vision by operation. In another case, there was double optic neuritis, contracted fields, no scotomata, V. = 1/5 in each eye, successive crops of retinal hemorrhages, violent fronto-occipital headache and insomnia. After consultation with Dr. Weisenburg a decompression operation was advised for relief of the optic neuritis, notwithstanding the absence of focal symptoms. Operation was refused by the patient. During two years potassium iodid and mercurials were administered without result. The upper nasal fossæ were then found blocked by polypoid masses and hypertrophied and enlarged middle turbinates. Transillumination showed both frontal sinuses and anterior ethmoidal cells opaque. The polypoid tissue was removed with a snare and the middle turbinates were amputated. This was followed by a profuse creamy white discharge which continued for many days in diminishing quantity. The operations were followed by prompt relief of the pain and insomnia and a steady subsidence of the swelling in both optic nerves. In a month the fields of vision were normal and in two months central vision rose to 6/5 in each eye, and a year after the operative interference the man remained well. The swelling of the papillæ had entirely disappeared. In a third case the patient, a man, when first seen, was blind in the right eye from atrophy of the optic nerve, and vision was reduced to 1/10 (6/60) in the left from well-advanced atrophy. The field was contracted and fixation eccentric (central scotoma). The same nasal and sinus conditions were present as in the other cases, but amputation of the turbinates was not permitted. Large polypoid masses, however, were removed with the snare and the parts carefully irrigated for a month, during which vision in left eye rose to 6/20. The patient then went to Europe and placed himself under the care of Professor Pagenstecher. After an absence of six months he returned totally blind in both eyes and the upper nasal fossæ again stuffed with a polypoid mass, and still suffering from frontal headache. A careful study of the patient by Dr. C. K. Mills failed to discover any focal symptom. Since these experiences I think it probable that some of the inexplicable cases of optic neuritis I have seen, and which have not proved amenable to treatment, may have belonged to this group of optic neuritis due to sinus disease.

DISCUSSION

DR. T. H. WEISENBURG: When I first saw the patient he had the general symptoms of brain tumor, viz., headache, vertigo and choked disc which gave me the impression that the man had a brain tumor, but fortunately for the patient, he would not consent to operation.

DR. ALFRED R. ALLEN: It might be possible to effect a cure in such cases as Dr. Risley's by the use of hyperemia. Schmieden and Meyer have had more or less success in clearing up these troublesome conditions by this method. To treat a choked disc in this way seems somewhat homeopathic but it could be done while the disc was kept under observation to see if any harm were being done. If the treatment could be prolonged the first etiologic factor could be cleared up.

DR. C. W. BURR: This is important to neurologists because the first thing they think about when they see an irregular optic neuritis is intracranial disease and I am sure that not a few cranial operations would have been spared if neurologists had understood the subject which has been presented.

DR. WILLIAM G. SPILLER: Dr. Risley's paper is important in that it shows how optic neuritis may be produced by extracranial disease. Whenever there is no sign of intracranial disease outside of the optic neuritis, the nose and its sinuses should be examined.

DR. F. X. DERCUM: The paper brought out the fact that in a large hospital service the patients can not be examined so exhaustively as they should. Will Dr. Risley explain the mechanism of the production of optic neuritis by sinus disease?

DR. S. T. RISLEY: If time had permitted I would have reported other cases presenting other phases of the subject. In reference to treatment of these cases patients with *stauungs-hyperämic*, the only treatment apt to prove of value when the sinuses are blocked with pus is to drain them. Optic neuritis is retrobulbar in origin. The optic atrophy observed in some of these sinus cases is probably not primary but begins as a choked disc and the atrophy is part of a retrograde neuritis.

Indurative Headache

DR. N. S. YAWGER: Indurative headache is of organic origin, chronic and usually paroxysmal, occurring in various parts of the head, and due to deposits or infiltrations at different points, chiefly in the muscles of the head and neck. The disease has been recognized for years abroad, notably in Sweden and Germany. Edinger states that this is probably the most frequent form of organic headache. This condition is sometimes called cephalalgia, cephalodynia, migraine, hemicrania, cranial neuralgia or neuritis, and seems to be due to a deposition at the insertions or within the bodies of the muscles of the head and neck. It comes and goes at first and later becomes chronic, and when the chronic condition is present a headache may be brought on by fatigue, bad air, chilly and rainy weather. In the latter case it is sufficient to get within the outer limits of storm conditions and not necessarily within the area of rainfall. Attacks are most frequent in the fall and spring. It seems likely that the condition is due to an excess of uric acid or an allied substance and the subjects are often neurasthenic. The depositions are found present in three stages: (1) Swelling, (2) resistance, (3) induration. The longer they exist the firmer they become and the more resistance they offer to treatment. During the attack, fever and redness are absent. All cases of headache should be examined by forcible flexion and twisting of the neck which will often bring out pain at the sites of these depositions in the back of the head and neck. Examination can be made to best advantage during a paroxysm because the swelling and sensitiveness are then greater. The scalp should be thoroughly palpated for thickenings, irregularities, indurations, and nodules. Points of hypersensitiveness are frequently found in the trapezius, scaleni, splenii, and sternomastoid muscles, along the base of the scalp and adjacent parts of the neck, on the spinous processes of the upper cervical vertebræ, and in the temporal and supraorbital regions. Other sites of invasion of these deposits are the inner side of the knee, the inner and outer aspect of the ankle, and within the bodies of the deltoid and abdominal muscles. Cases have been mistaken for meningitis, appendicitis, or sciatica. Deafness has been produced by pressure on the Eustachian tube. The picture presented by lumbago is strikingly similar, inasmuch as it may follow exposure to cold, it may become chronic and offer resistance to palpation, it is relieved by pressure, there is an absence of fever and redness, and it yields to the same treatment. Persons having a tendency to these depositions should drink an abundance of water between meals, avoid fatigue, take outdoor exercise, and, if the condition is later proven to be due to an excess of uric acid or an allied substance, the diet should contain a low percentage of purins. For a severe acute attack it is wise to give a purgative, a hot bath, apply hot dry applications locally and give repeated large doses of sodium salicylate or aspirin, or salophen internally.

Other Papers Read and Cases Presented

"A Case of Probable Occlusion of the Posterior Inferior Cerebellar Artery," by Dr. Horace Carncross; "Hysterical Paralysis," by Dr. C. W. Burr; "The Syphilitic Form of Multiple Sclerosis," by Drs. W. G. Spiller and A. H. Woods; exhibition of "Gordon's Precision Aesthesiometer," and "Disease of the Optic Nerve as the Early Symptom of Multiple Sclerosis," by Dr. Alfred Gordon.

V 19

CALIFORNIA ACADEMY OF MEDICINE

Regular Meeting, held in San Francisco, Dec. 22, 1908
The President, DR. HOWARD MORROW, in the Chair

Exophthalmic Goiter

DR. EMILE SCHMOLL, San Francisco: I have here a man with exophthalmic goiter. When the patient first consulted me he presented the following symptoms: There was tachycardia and the legs were edematous up to the abdomen. There was enormous tumefaction of the liver, which reached below the umbilicus, and was pulsating. The pulse was 160, and irregular. There was dilatation of the heart, the apex beat reached to the left axillary line, the right side being 3 cm. outside the right sternal border. There was enlargement of the thyroid on both sides; the gland was soft to the touch and was pulsating. The circumference of the neck was 16½ inches. There was very pronounced exophthalmos. In view of the critical condition of the heart and the mitral and tricuspid insufficiency, it was thought that surgical interference was impossible or that before such question could be decided the circulatory symptoms must be improved. Furthermore, in my opinion, the presence of an enlarged thymus behind the upper part of the sternum, spoke against surgical intervention. Deaths on the operating table or following within twenty-four hours after operation have shown that in the majority of these cases of exophthalmic goiter there is a persistent thymus. Garry, of Bonn, considers that dulness behind the upper part of the sternum contraindicates operative interference. It was decided, therefore, to treat this patient internally, and he was put on complete rest and digitalis. He responded very quickly. The amount of urine began to increase on the second day, and on the fifth or sixth day the edema had completely disappeared. The liver had diminished considerably, to about 1 cm. below the costal border, and the acute dilatation of the heart had disappeared. However, at this time, while the tachycardia had been controlled by the digitalis, the goiter did not show any change and the exophthalmos did not retrocede, while the nervous symptoms had become excessive. On one evening the man even presented an attack of acute mania; it was impossible to reason with him and large doses of morphin were needed to quiet him. It was then decided to try a line of treatment which I have followed in several other cases with good results: meat was excluded from the diet. The amount of albumin and nitrogenous food was reduced to the minimal amount with corresponding carbohydrates and fat. I gave food which contained about 70 grams of albumin and about 3,000 calories which was more than he needed, and the man began to gain rapidly. At the beginning I gave him sodium phosphate, but could not see any improvement. I then gave ½ grain of sodium iodid twice a day. Under this treatment the pulse came down to about 70 a minute, still remaining irregular; the heart, however, was fully compensated. The goiter began to show improvement after three or four days; it became harder, losing its pulsating character, and the exophthalmos retroceded. After this treatment had been carried out for several weeks, the circumference of the neck was reduced to 15¼ inches and the exophthalmos was still retroceding; it is, however, still noticeable. Lately the pulse has gone up again. There is no sign of cardiac insufficiency. The nervousness has almost completely disappeared and the patient has gained about 20 pounds in weight.

My standpoint has been that in every case of exophthalmic goiter internal treatment ought to be tried. If within two months there is no improvement the case ought to be turned over to the surgeon. As an indication as to whether improvement is obtained, I especially consider the weight of the patient. If the individual increases in weight and the nervous symptoms are controlled, I consider the case to be progressing favorably and to present a favorable outlook for internal treatment. If, however, the patient loses weight, surgical treatment should be instituted. In this case the pulse has remained irregular.

DISCUSSION

DR. W. I. TERRY, San Francisco: Every patient with exophthalmic goiter should be under medical treatment for a short time, and if no improvement is obtained, surgical interference should be considered. Some of these patients respond promptly to medical treatment. I think some of the edema and heart symptoms and the liver condition were probably due to a preceding typhoid. This goiter came on immediately after an attack of typhoid, which may have weakened the heart muscle to a considerable degree. Dr. Schmoll has also improved the exophthalmos, but he has not cured it, nor can he expect either by surgical or medical means to cure an exophthalmos when it is so pronounced. The question of relapse in these cases is to be thought of. This man will have to be followed up for some time; he may relapse, and if he does a thyroidectomy will be indicated. The operation should certainly be done before the heart muscle gives out and before the man has the typical extreme symptoms of exophthalmic goiter.

DR. W. W. KERR, San Francisco: Like other medical men I am always glad to hear of something that gives us more hope than we have had before in the treatment of exophthalmic goiter. Many cases are inoperable, more especially in women, who suffer from a great deal of circulatory disturbance, and with whom the question of operation sometimes can not be considered. The use of digitalis I have never found satisfactory; sometimes one can alleviate the disturbance, but there are never results which give one confidence to persist in its use. Sometimes there is improvement when the patient has led an active life and has strained the heart, and in that case there might be restored compensation. The use of an iodid has not been successful in my hands. I generally use it in doses of from 5 to 10 grains, giving from 15 to 30 grains in a day, and have never seen any good come from it. In most cases the disease was more aggravated than benefited by it. I may have been at fault in giving such a large dose.

DR. EMILE SCHMOLL, San Francisco: In this case I have not had an occasion to use anything so far as the circulation was concerned, because the pulse immediately fell after the use of digitalis to 80. I agree with Dr. Kerr that digitalis is useless unless one has to deal with myocardial insufficiency. Again, with rapid pulse digitalis is often dangerous and should be advocated only in cases in which there is decided myocardial insufficiency and in which there is edema and enlargement of the liver.

Medicolegal

What Is Included in the Term "Limb"

The Court of Appeals of Kentucky says, in Lorts & Frey Planing Mill Co. vs. Weil, a personal injury case brought by the latter party, that it was alleged in the plaintiff's petition that, as a result of his fall, the tendons, ligaments and muscles of his limbs had been permanently weakened, and their strength impaired, whereas on the trial he testified, among other things, that the ligaments in one of his feet, which held the instep in a curved position, were severed, which caused the instep to drop, which produced what is known as "flatfoot." This last statement the defendants claimed surprised them; that they had no reason to anticipate that any such injury would be claimed by the plaintiff; that it was only claimed in the petition that his legs were injured. But the court is of the opinion that the defendants had no reason to be surprised at the introduction of this testimony, because, while the word "foot" did not specifically appear in the petition, it was alleged that the plaintiff's limbs were injured, and the word "limb" includes from the hip to the sole of the foot.

Breach of Marriage Promise for Syphilis

The Supreme Court of Iowa says in the breach of marriage promise case of Beans vs. Denny that the court might well have directed the jury that a person is always excusable for

declining to carry out his promise of marriage to one afflicted with syphilis, unless made with the knowledge of this condition. See, as bearing on this subject, Trammell vs. Vaughan, 158 Mo., 214; Allen vs. Baker, 86 N. C., 91; Shackleford vs. Hamilton, 93 Ky., 80; Grover vs. Zook, 44 Wash., 489; Gring vs. Lerch, 112 Pa., 244; Goddard vs. Wescott, 82 Mich., 180; Vierling vs. Binder, 113 Iowa, 337. Most of the cases deal with a situation in which disease was pleaded as an excuse or justification for non-performance of the contract by one party when demanded by the other. But in Grover vs. Zook, 44 Wash., 489, the defendant was relieved of his promise to marry an incurable consumptive on the ground of public policy; and it is held in several jurisdictions that the fact that a spouse is afflicted with syphilis when married which is incurable, or of which there is but a remote probability of effecting a cure, is good cause for annulling a marriage on the ground of fraud. These rulings are in harmony with the instruction of the trial court that, in event the plaintiff was not cured, the defendant was under no obligation to perform. But the evidence was in conflict as to whether permanent recovery from the disease in its secondary stage ever could be effected. The physicians agreed that it might be controlled, but some of them insisted that it was a constitutional disorder which was likely to be transmitted to offsprings, and might break out again on the person afflicted, even after the lapse of fifty years. There can be no doubt but that the curability of the disease is matter of grave doubt in the medical profession; and, were this court confronted with the proposition as to whether one who has become afflicted therewith may complain of a breach of a previous promise of marriage at least when made in ignorance of the malady, it should hesitate long before so holding. The point, however, was not saved in this record.

Competent Evidence Against Professional Abortionist

The Supreme Court of Illinois says, in the case of People vs. Hagenow, where it affirms a conviction of murder by producing an abortion resulting in the woman's death, that in some jurisdictions proof that the defendant had been guilty of causing criminal miscarriages or abortions on other pregnant women than the one named in the indictment has been held proper on a trial against the defendant on an indictment of this character (People vs. Sessions, 58 Mich., 594; People vs. Seaman, 107 Mich., 348), while in other jurisdictions it has been held that such proof is not competent (Rosenweig vs. People, 63 Barb. [N. Y.] 634; State vs. Crofford, 121 Iowa, 395). And while there is some conflict in the authorities, and the question is not free from doubt, this court thinks that the evidence is admissible.

Had the evidence in this case shown that the woman in question was the only pregnant woman whom the defendant had caused to miscarry or abort, it might not have been unreasonable to presume that she did so in good faith and for the purpose of saving the woman's life. If, however, it could be shown that the defendant advertised in the public press to treat women who were pregnant; that she stated in such advertisement that she had had long experience in the treatment of such women who were pregnant, etc., it would be clear, the court thinks, that the presumption that she caused the woman to miscarry or abort to save her life would be greatly weakened, and a criminal knowledge and intent on her part to cause her to miscarry or abort would be shown.

Moreover, while the jury would in this case have been justified in findings from the condition of the woman when she went to the defendant's place and the testimony of the physicians who made a postmortem examination that no cause existed for the causing of a miscarriage or the producing of an abortion on her to save her life, the state was not required to rely on this class of testimony alone, but had the right to show, if it could, that the defendant was not carrying on a hospital in a legitimate way for the treatment of women who were pregnant, but that she was a professional abortionist, for the purpose of rebutting the presumption that she in good faith caused the miscarriage or produced an abortion on this woman to save her life, and for the purpose of showing that she must have known that the woman was pregnant, and that she operated on her with the criminal knowledge and intent to cause her to miscarry or to abort; and, if such testimony was competent as a part of the state's case in chief, the defendant could not render it incompetent by any defense to the indictment which she might seek to interpose. Three members of the court dissent.

Cancer and "Sound Health"

The Supreme Court of Minnesota had, in the case of Murphy vs. Metropolitan Life Insurance Co., an action on a life insurance policy which was conditioned that no obligation should be assumed by the company unless on the date thereof the assured was alive and "in sound health." The court holds that the term "sound health," as it was used in the policy, did not mean perfect health, but an absence of any disease that had a direct tendency to shorten life. And the evidence being practically conclusive that the insured was afflicted with cancer when the policy was issued, the court holds that the insured was not then in sound health. It says that it was clear that if the insured at the date of the policy was afflicted with an organic disease, either sarcoma or cancer, he was not then in sound health within the meaning of the policy. The testimony of two physicians related directly to the condition of the boy's knee and the cause of such condition. Their testimony was not wholly opinion evidence, for they respectively testified to facts relating to the condition of the knee and the development of the disease. There was no contraindication, direct or indirect, of the testimony of either of them, nor was the evidence inherently improbable; on the contrary, it seemed reasonable. Neither the judge nor the jury could arbitrarily reject the testimony of the two physicians as to facts or as to their professional opinion based thereon. A fair consideration of their testimony so directly led to the conclusion that the insured, when the policy was issued, had a malignant disease generally known as cancer that the court would have been bound to set aside any verdict to the effect that he was then in sound health.

V 19

Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

Boston Medical and Surgical Journal

February 11

1 Serodiagnosis of Syphilis. F. P. Gay and J. G. Fitzgerald, Boston.
2 Human Milk in Treatment of Various Infections. F. P. Denny, Brookline, Mass.
3 *Psychotherapy as Applied to Children. A. C. Eastman, Springfield, Mass.
4 Medicine in the Bible (A Brief Review). H. S. Bernstein, Boston.

3 Psychotherapy in Children.—Eastman calls attention to the fact that childhood is the most suggestive period of life and that from early infancy the child is influenced by suggestion. First come the suggestions of external stimuli through the senses, then the suggestion of obedience to certain routine, necessary functions imposed on the infant for his physical development and, finally as speech develops come the innumerable suggestions picked up from the conversation of the child's associates. The older a child grows the more firmly fixed become the habits of both thought and action. Hence, if suggestion can change habits fully developed in an adult, how much easier, says Eastman, to change and model the mind into correct thoughts and actions during this plastic stage of childhood. Eastman divides childhood into three periods, viz., infancy and early childhood, from birth until the age of 5; early school life, from 5 to 10 years of age; early adolescence, from 10 to 15 years of age. At birth, the child is a little animal, instinctively eating and sleeping, oblivious to outside influences. At the age of 5 he has become a human being, so to speak, has learned the first lessons in obedience, and has formed both good and bad habits. His mind is fully alive to his small world and he absorbs more knowledge in

twenty-four hours than we can appreciate. During this first period Eastman states that the best time to use suggestion is just after the child has gone to sleep; if this is impossible it may be used during sound sleep. The child should be addressed in a firm natural voice and the suggestion repeated several times; only one suggestion should be used at a time in order to avoid confusing the child. Eastman cites several cases illustrative of the good accomplished by suggestion in children during this age period. In the second age period suggestion is especially adapted to the cure of nervous conditions resulting from too close confinement and too keen competition in school. In both these periods he also advocates "negative suggestion"; in other words, ignoring a symptom is often the best method of teaching the child to overcome it. The third period brings the individual to the borderland between childhood and adult life and of course opens up a large field for therapeutic and educational suggestion.

New York Medical Journal

February 13

5 Theories and Problems of Heredity. J. Wright, New York.
6 Results in Four Hundred Operative Cases of Mastoiditis. F. P. Calhoun, Atlanta, Ga.
7 One Hundred and Ninety Consecutive Operations From Surgical Service of Fordham Hospital. A. Nicoll, New York.
8 *Diagnosis of Chronic Bright's Disease by Signs Other Than Those Furnished by the Urine. H. R. Allyn, Philadelphia.
9 *Practical Results Obtained in the Philippines in Reducing the General Mortality by the Elimination of Intestinal Parasites, Especially the Hook Worm. V. G. Heiser, Manila, P. I.
10 Neurasthenia. H. M. Folkes, Biloxi, Miss.
11 Congenital Hypertrophic Stenosis of Pylorus. W. N. Bradley, Philadelphia.
12 Case of So-called Birthmark. F. A. Thompson, Milwaukee.

8. **Non-Urinary Diagnosis of Bright's Disease.**—Allyn states that not infrequently, in his experience, the urine has given very little help in the diagnosis. It is not uncommon for the analyst, in cases of chronic Bright's diseases, to report the urine negative for albumin and casts. In the majority of these cases, but not in all, persistent low specific gravity of the urine directs attention to the probable diseases of the kidneys. Allyn cites cases in which the specific gravity had been well maintained, and yet extensive disease of the kidneys was found at autopsy. The result, therefore, is that chronic nephritis is often overlooked and the patient treated for heart disease, anemia, or weakness and malnutrition of unknown origin. The author enumerates the extra-urinary phenomena of this disease and states his belief that by them the disease may often be diagnosed, even if the urine is negative. Cardiovascular signs of this disease are probably the most constant and important. They consist, briefly, in enlargement of the heart, particularly the left ventricle, in accentuation of the aortic second sound, in raised blood pressure, thickening of the walls of the artery, and in such phenomena as dizziness, headache, hemorrhage and malnutrition. Rise in blood pressure is very common in chronic Bright's disease. Generally, it can be perceived by the finger, if the physician has considerable practice in feeling the pulse. Allyn refers to 130 cases reported by Janeway in which the systolic pressure, recorded by the sphygmomanometer was 200 mm. or more and in all but 10 or 15 per cent. there was chronic nephritis. Thickening of the blood vessels is another frequent symptom; the amount of thickening varies greatly and does not always bear a direct relation to the gravity of the nephritis. Enlargement of the left ventricle is easily made out. The apex beat instead of being within the nipple line is displaced to the left so as to be flush with the nipple line and beyond it; at the same time it is displaced more or less downward. Other cardiovascular phenomena are hemorrhages, which may take place in the skin, kidneys, stomach or bowels. Hematuria occurs occasionally especially in the gouty form of nephritis, when there is arteriosclerosis of the kidney vessels. Albuminuric retinitis and detachment of the retina occur in a number of cases, the former being the more frequent. Sometimes eye changes indicating nephritis are found before the family physician has any suspicion that disease of the kidney exists. Other symptoms are dizziness and vertigo, which may occur as symptoms of disturbed cerebral circulation, as the result of toxemia. Nutritional changes are characterized chiefly by loss of strength and infrequently by nausea, vomiting, painful digestion and attacks of diarrhea, without adequate cause. In toxic phenomena he cites such symptoms as headache, insomnia, delirium, coma, convulsions and hemiplegia, and bronchial and pulmonary symptoms such as dyspnea, bronchitis and edema of the lungs. He states also that he has seen several cases of peripheral neuritis, in one of which there were recurring attacks of gastralgia associated with anacidity.

9. Abstracted in THE JOURNAL, Dec. 5, 1908, p. 1994.

Detroit Medical Journal

January

13 The Surgeon, the Anesthetist, and the Patient. C. S. Oakman, Detroit.

Medical Record, New York

February 13

14 Diet as a Means of Increasing Vital Resistance in Tuberculosis, with Special Reference to the Protein Ration. J. H. Kellogg, Battle Creek, Mich.
15 Cholecystectomy vs. Cholecystotomy. J. F. Erdmann, New York.
16 Diagnostic Use of Tuberculin, with Special Reference to the Cutaneous and Percutaneous Tests. H. F. Stoll, Hartford, Conn.
17 Treatment of Erysipelas by Carbolic Acid and Alcohol. A. Judd, New York.

Lancet-Clinic, Cincinnati

February 6

18 Treatment of Cancer of the Breast, with Special Reference to the Value of Roentgenotherapy. J. T. Dunn, Louisville, Ky.
19 Intelligent Cooperation Between School and Home. L. Bloom, Cincinnati.
20 *Causation and Treatment of Infantile Convulsions. E. W. Saunders, St. Louis.
21 Specialism in Medicine. W. L. Shollenbarger, Cincinnati.

February 13

22 Feeding and the Use of Alcohol in Typhoid. J. H. Landis, Cincinnati.
23 The Incurable Blind. W. S. Keller, Cincinnati.
24 The Hazard Attendant on Association with a Rabid Animal. T. V. Keene, Indianapolis.

20. **Infantile Convulsions.**—Saunders ignores the usual classification of factors of infantile convulsions and adopts the following didactic and clinical nomenclatures:

I.—CENTRAL CAUSES

1. Gross lesions of the brain or meninges, morbid or mechanical, congenital or acquired. 2. Concussion—commotio cerebri. 3. Sudden changes of pressure in the blood or cerebrospinal fluid.

II.—CENTRIPETAL CAUSES

1. Reflexes. 2. Psychomotor.

III.—DISTROPHIES AND INANITION

1. Rickets—tetany. 2. Acute and chronic cerebral inanition.

IV.—HEREDITARY OR CONGENITAL (INORGANIC CAUSES)

1. Similar or dissimilar heredity. 2. Prematurity, congenital debility.

V.—INTOXICATION

The whole list of drugs and poisons, including food poisons, credited with spasmogenic power. (CO_2 and acetone excepted.) Some of them, such as alcohol, may be imbibed with the breast milk.

VI.—INTOXINATION

The specific toxins of acute infectious diseases, including those of organisms like the colon bacillus, which sometimes become parasitic.

VII.—PYREXIA FROM

1. Toxins. 2. Reflex irritation. 3. Heat stroke.

VIII.—AUTOINTOXICATION FROM

1. Gastrointestinal disturbance. 2. Hepatic insufficiency. 3. Disturbance of the internal secretions. 4. Renal insufficiency. 5. Pulmonary and cutaneous insufficiency.

IX.—MATERNAL AUTOINTOXICATION

1. Puerperal eclampsia. 2. Violent emotion shortly before nursing.

X

1. Asphyxia. 2. Whooping cough. 3. Thymic asthma.

XI.—SPASMOPHILIA

XII

Eclampsia of the new-born (requires a separate consideration).

He discusses these conditions in detail, and expresses himself profoundly dissatisfied with the result of the routine emergency treatment of infantile eclampsia. He has long discarded the hot bath and is not sure that chloroform is an unmixed blessing. Death by asphyxia is the imminent danger and the system becomes more tetanized as oxygen is withdrawn. He therefore indorses Holt's plea for trial of oxygen inhalation as a routine measure. Morphin as an antispasmodic is more effective than chloroform. The cool pack is not open to the objections of a hot bath. In rickety cases phosphates with appropriate diet and hygiene do good. Bromids and chloral

are safe and useful as antispasmodics. Veratrum viride is especially indicated in acute affections.

Northwestern Lancet, Minneapolis

February 1

25 The Interest of the Physician in the Medical Institutions of the State. L. C. Mead, Yankton, S. D.
26 Papillary Synovitis. C. J. Klingnell, Minneapolis.
27 Rectal Anesthesia: Demonstration of Apparatus with Report of Additional Cases. C. F. Denny and L. S. B. Robinson, St. Paul.
28 Mistakes in Diagnosis in the Upper Abdomen. J. E. Moore, Minneapolis.
29 Tabes Dorsalis. W. Reid, Deerwood, Minn.
30 *The Cutting of Cicatricial Strictures of the Esophagus Through the Esophagoscope. W. Lerche, St. Paul.

30. Cicatricial Strictures.—Lerche discusses the causation, pathology, symptoms and diagnosis of cicatricial stricture and describes the case of a boy 3 years old who had a severe cicatricial stricture from sucking lye. The child was reduced to skin and bone, and death was imminent. As not even liquid could be swallowed and enemata were the only means of nutriment, he describes the method in which he succeeded in getting a filiform whalebone bougie into the tight stricture by filling a bent glass tube covered with rubber tube with as many of the bougies as would permit an easy gliding in and out of the instrument and passing the rubber covered glass tube down to the obstruction. A little manipulation enabled him to pass one of the filiforms through the first stricture. A second and subsequently a third stricture were penetrated in like manner after some dilatation of the one above it had been effected. Finally he devised a new esophagotome with blades of different sizes and incised the strictures through the esophagoscope. The child recovered and is in excellent health. The method of using filiform whalebone bougies is particularly suitable to valvular and ring strictures. Lerche emphasizes the fact that the cutting of strictures must be done under the guidance of the eye.

Medical Fortnightly, St. Louis

February 10

31 Case of Double Monstrosity (Thoracopagus Teras Anactadidymum.) J. F. Menestrina, St. Louis.
32 *Treatment of Cancer of the Rectum. R. H. Barnes, St. Louis

32. Abstracted in THE JOURNAL, Nov. 14, 1908, p. 1728.

American Journal of Medical Sciences, Philadelphia

January

33 *Clinical Significance of Glycosuria in Pregnant Women. J. W. Williams, Baltimore.
34 *Medical Gymnastics in Early Myocardial Incompetence Without Valvular Disease. R. H. Babcock, Chicago.
35 *Value of the Injunction Method of Administering Drugs to Children. B. K. Rachford, Cincinnati.
36 Treatment of Irreducible Congenital Luxations of the Hip by Operative Means. G. G. Davis, Philadelphia.
37 Postoperative Treatment of Malignant Disease. E. G. Williams, Richmond, Va.
38 Differentiation of Common Types of Protracted Fever. D. Bovaird, New York.
39 Certain Complications of Pneumonia. M. H. Fussell, Philadelphia.
40 Influenzal Meningitis. R. A. Cohoe, Baltimore.
41 *Illuminating Gas Poisoning. G. I. Jones, Washington, D. C.
42 Circumscribed Serous Spinal Meningitis. W. G. Spiller, Philadelphia.
43 Varix of a Papilla of the Kidney of Persistent Hematuria. H. Cabot, Boston.
44 *Problem of Immunity in Tuberculosis. E. R. Baldwin, Saranac Lake, N. Y.
45 Cammidge Reaction in Experimental Pancreatitis. J. Speese and E. H. Goodman, Philadelphia.
46 Surgery of the Gall Bladder and Bile Ducts. W. D. Hamilton, Columbus, O.

33. Glycosuria in Pregnancy.—Williams states that he knows of no complication of pregnancy the significance of which is more variously interpreted than the presence of sugar in the urine. This divergence of opinion, he says, is in great part due to the influence of a paper read by J. Matthews Duncan, before the London Obstetrical Society in 1882. At that time Duncan collected from his own experience and the literature, the histories of twenty-two pregnancies occurring in sixteen women who had become pregnant while suffering from diabetes, or who developed the disease during the course of pregnancy. Of these women four died in coma or collapse within a few days after delivery and seven others perished from diabetes or tuberculosis within the following two years, while 47 per cent. of the children were lost. Matthews concluded, therefore, that diabetes constituted one of the most serious complications of pregnancy and his views were accepted without question. Williams does not agree unquestiongly with Matthews' views and in this article reports in detail cases of glycosuria occurring in his practice and reviews in tabular form cases reported in the literature; from these he draws the following conclusions:

1. A positive reaction with Fehling's solution during pregnancy does not necessarily indicate the existence of diabetes, but is usually due to lactosuria or to transient, alimentary, or recurrent glycosuria.

2. In such cases it is imperative to determine whether the sugar occurs as lactose or glucose, as lactosuria is without clinical significance and is probably associated with premature activity of the breasts.

3. The significance of glycosuria is not so clear. If alimentary in character it may be regarded with impunity. Otherwise it may be of the transient or recurrent variety, or may indicate the existence of true diabetes.

4. If the glycosuria appears late in pregnancy, does not exceed 2 per cent. in amount and is not accompanied by symptoms, it is probably transient and may disappear spontaneously at any time or persist until the end of pregnancy. In either event, it is usually of slight clinical significance, and merely indicates that the patient should be carefully watched. If the sugar appears early in pregnancy and in large amounts, the condition is more serious, as it may be impossible to make a positive diagnosis until after delivery, when the condition disappears in glycosuric, but persists in diabetic patients.

6. Pregnancy may occur in diabetic women or diabetes may become manifest during pregnancy. Either is a serious complication, although the prognosis is not so alarming as is frequently stated; many patients do perfectly well, while a smaller proportion die in coma or collapse at the end of pregnancy, or during or shortly after labor.

7. If the output of sugar is large and can not be controlled, or at least markedly diminished, by suitable dietetic and medicinal treatment the indication of abortion or premature labor is indicated even in the absence of serious symptoms, and much more so when they are present.

34. Medical Gymnastics in Myocardial Disease.—Babcock discusses the cardiopathies encountered in men generally of large physique who lead sedentary lives and are, in addition, hearty eaters and heavy smokers. These men generally take on weight and commonly display an abdominal girth out of proportion to the chest development. In a certain percentage of these cases the men have been athletes at college but on entering professional life have neglected physical exercise entirely. In the majority of instances they possess indomitable energy and almost tireless activity, and display a systolic blood pressure that is up to, if not above, the normal limits. In the late fifties or early sixties these men consult the physician for relief from symptoms which betoken long-continued and at length injurious cardiac strain. The entire cardiovascular system is affected, though not uniformly. The kidneys also are involved, though in the cases referred to in this paper the renal inadequacy is overshadowed by the cardiac symptoms. Occasionally the coronaries are so involved as to present symptoms of angina pectoris. Babcock sends patients of this type to a medical gymnast to whom he had explained the end to be attained. The gymnastics to which the patients are subjected are of the kind investigated by Levin, who showed that if certain simple exercises were given properly it was possible to slow and strengthen the pulse instead of accelerating it, a very vital principle in these cases. The exercises given consist in both active and passive movements, according to the degree of myocardial incompetence present. The former comprise certain rolling and bending movements of the trunk executed by the gymnast, who, standing behind the individual seated on a wooden horse, with his feet held firmly by toe-straps, grasps the shoulders and firmly, yet not too vigorously, bends the body forward and then rolls it around to the opposite side in a backward direction, in such manner that, flexed in the beginning, the trunk becomes extended when the movement is half completed, and ends again in a position of strong flexion. To these may be added passive flexion and extension of the extremities, and alternate expansion and compression of the chest, very much after the manner of performing artificial respiration. The active exercises, which in all cases are gentle at first and performed by the help of the gymnast, and only by degrees increased in vigor, consist in deep breathing, in bending, pulling, lifting, etc., on a horizontal bar or ladder, or such other movements as in the judgment of the gymnast will promote respiration and venous flow and reduce the girth of the ab-

V 19

domen. But whatever be the kind of exercises, one essential principle underlies them all, namely, the patient must not be allowed to hold his breath, but must breathe regularly and deeply in rhythm with the movements so as to inspire or expire according as the exercises expand or contract the chest and depress or raise the diaphragm.

The purpose of these exercises is not the development of the skeletal muscles, but the restoration of the functional integrity of the myocardium, and this they accomplish more or less effectively, not only by increasing venous flow on the one side and by dilating the intermuscular arterioles on the other, but also by improving cardiac metabolism. Of course, the degree and permanence of the improvement must depend largely on the state of the heart muscle. If this is extensively degenerated, no amount or kind of treatment can be expected to achieve much, and such improvement as is gained can not last long. In such cases, therefore, if dilatation and inadequacy are pronounced, the so-called resistance exercises are preferable, although to these may be added with advantage such deep breathing movements as, with the aid of a trained attendant, can be performed without danger of strain to the heart wall. As might be expected, the most pronounced benefit has been observed in cases of early or moderate myocardial incompetence, shown by breathlessness, or palpitation on slight cause, and on examination by increased cardiac dulness, feebleness of the first tone at the apex, accentuation of the pulmonic second sound, and sometimes a faint systolic whiff in the mitral area. In most, but not all cases, the blood pressure is elevated above the normal. In such cases the first indication of improvement is shown by the greater ease of respiration and a general sense of ease or lightness. Energy is increased and fatigue comes less easily, while a better action of the bowels and a diminution of waist measure are generally observed. Babcock states that his experience with medical gymnastics in cases showing early incompetence of the myocardium warrants him in recommending them, if properly controlled, and in asserting the belief that, if these and allied physical exercises were used more extensively and systematically by men of the build and habits to develop chronic myocardial and arterial disease, they would delay, if not prevent, the onset of cardiac inadequacy.

35. **Administration of Drugs to Children.**—Rachford advocates the administration of drugs to young children by inunction. He has given in this way guaiacol, iodin, oil of wintergreen, and salicylic acid. These medicines, with the exception of the iodin, were combined with anhydrous lanolin in the proportion of 1 dram to the ounce. In applying the ointments the following technic was observed: The skin of the chest and abdomen was carefully washed with soap and warm water, and hot, moist towels were then applied for a few moments to warm and redden the skin. One dram of the ointment was then carefully and gently rubbed into the skin. The inunction was continued for from five to ten minutes. Previous to the inunction the child's bladder had been emptied, and directions were then given to save all urine passed. If at the end of two hours no urine was obtained the bladder was emptied by catheterization, and subsequent specimens of urine were also saved for examination. The urine thus obtained was examined to determine the presence or absence of the drug which had been administered by inunction. By this method the following results were obtained: Eight children under 7 years of age were rubbed with oil of wintergreen and in every instance the drug was found in the urine within two hours after rubbing. It was observed that in the younger children, some of whom were less than a year of age, the reaction in the urine occurred earlier, in one instance within an hour and one-half, so that, on the whole, it may be said that the younger the child the earlier the reaction; if a definite time limit was observed the reaction was stronger in the younger children.

41. This article was abstracted in the Department of Therapeutics, Feb. 6, 1909, page 473.

44. Abstracted in THE JOURNAL, Oct. 24, 1908, p. 1447.

Colorado Medicine, Denver

January

47 *Differential Diagnosis of Lesions of the Mouth Due to Carcinoma, Sarcoma, Syphilis and Tuberculosis. T. E. Carmody, Denver, Colo.
48 Etiology and Diagnosis of Syphilis and the Bearing of Our Recent Knowledge of These Points on the Treatment of the Disease. C. E. Edson, Denver.
49 Integumental Tuberculin Reaction, with Report of 155 Moro Inunction Reactions. G. B. Webb and W. W. Williams, Colorado Springs.
50 Typhoid Fever. H. G. Garwood, Gorham, Colo.

47. **Lesions of the Mouth.**—Carmody discusses cancer, sarcoma, syphilis and tuberculosis of the mouth and gives a series of tables illustrating the differential diagnosis between these conditions as affecting the jaw, tonsil, lip and tongue. The article is fully illustrated.

Kentucky Medical Journal, Bowling Green

January

51 *Diagnosis and Treatment of Diseases in the Accessory Sinuses of the Nose. G. C. Hall, Louisville.
52 Radiography of the Accessory Sinuses. E. T. Bruce, Louisville.
53 *Care of the Pregnant Woman. H. M. Goodman, Louisville.
54 Treatment of Occipito-Posterior Positions. J. K. Freeman, Louisville.
55 Management of Third Stage of Labor. A. E. Gardner, Louisville.
56 Care of the Perineum. T. E. Gosnell, Louisville.
57 Anatomy and Pathology of Acute Intestinal Obstruction. G. A. Hendon, Louisville.
58 *Surgical Diagnosis and Management of Acute Intestinal Obstruction. H. H. Grant, Louisville.
59 Acute Intestinal Obstruction—Diagnosis and Medical Management. W. B. Gossett, Louisville.
60 Treatment of Strabismus From the Standpoint of the General Practitioner. G. C. Hall, Louisville.
61 Case of Ophthalmoplegic Migraine. S. B. Hays, Louisville.
62 Recognition of Acute Glaucoma by the General Practitioner. H. Kelly, Louisville.
63 Domestic Sanitation. L. G. Contri, Winona, Ky.
64 Etiology and Symptomatology of Strabismus. W. T. Bruner, Louisville.
65 Duction Tests. H. Kelly, Louisville.
66 Non-operative Treatment of Squint. S. B. Hays, Louisville.
67 Operative Treatment of Squint. M. F. Coomes, Louisville.

51. Abstracted in THE JOURNAL, Oct. 31, 1908, p. 1546.

53. **The Pregnant Woman.**—The deviation from health to disease in pregnancy is so slight, and often so sudden, that serious complications for mother and child may make headway before recognition. Goodman therefore makes a vaginal examination as early as possible and endeavors to see these patients twice a month. He considers that many subsequent troubles are due to neglect during pregnancy. He insists on proper attention to the condition of the kidneys and urges examination of urine twice a month in the first half, and once a week in the last half of pregnancy. He has known the kidneys to break down in twenty-four hours in consequence of overindulgence in meats or rich foods at social functions. The diet of the pregnant woman should be so regulated that the kidneys are not called on to perform extra work. In hyperemesis the elixir of paraldehyd has given him the best results, but it is contraindicated in kidney involvement. He insists also on the advisability of an abdominal examination, as well as a vaginal one, in the last two months of pregnancy, to determine fetal viability, multiple pregnancy, the pelvic measurements, the position of the child, and in the case of a primipara, to ascertain whether from deformity, tumor, etc., it is desirable to induce premature labor or to allow the pregnancy to go to term, relying on forceps, podalic version, Cesarean section or symphyseotomy.

58. **Intestinal Obstruction.**—Grant emphasizes these points: Purgation and opium must be withheld as far as possible until the diagnosis is made. Exploratory laparotomy under conditions of reasonable evidence is no discredit, even if it be found to have been unnecessary, because when it is necessary, procrastination means almost certain death.

Interstate Medical Journal, St. Louis

January

68 *Causation and Treatment of Infantile Convulsions. E. W. Saunders, St. Louis.
69 *Automobile Fractures. S. Lange, Cincinnati.
70 *How Long Should the Woman Remain in Bed After Normal Labor? F. Hinchey, St. Louis.

71 *Physical Culture of the Puerperium. G. Gellhorn, St. Louis.
72 *Hygiene of the Mouth, Nose, Pharynx, Intestine, Skin, Mucous Membrane in General; of Lymph Bodies and Lungs. Prevention of Colds. N. P. Barnes, Washington, D. C.
73 The Apparatus Used by the Greeks and Romans in the Setting of Fractures and the Reduction of Dislocations. J. S. Milne, Hartlepool, Eng.

68. See Abstract No. 20.

69. **Automobile Fractures.**—Lange records four cases. He considers it probable that the automobile fracture is a subperiosteal one. The accident may be avoided by care in cranking, which should always be done on the upstroke. If the engine fails to start on the first upstroke the handle should be readjusted for the next trial. To guard against premature explosions the sparker should be retarded, which prevents ignition from occurring until the piston has reached the end of the cylinder.

70. **Rest After Parturition.**—Hinchey, from a careful observation and study, arrives at the following conclusions:

1. Early rising is beneficial because the lying-down position reverses the normal curve of the utero-cervical canal, conducing to subinvolution and to retrodeviation of the uterus, consequent on the inability to secure uniform anemia and atrophy of that organ.
2. In the early days after labor, there is an absence of unusual tension of the pelvic floor, in the upright posture, because the uterus rests on the pubis.
3. Exercise favors involution of the pelvic structure, so that by the time the uterus has reached the pelvis, these structures can afford the necessary aid to the internal uterine supports, thus preventing prolapse.
4. Hemorrhage and embolism are not to be feared.
5. Early rising affords drainage, which may prevent infection.
6. General metabolism is often impaired by prolonged rest to such a degree that lactation is inhibited and any tendency to invalidism is encouraged.

71. **The Puerperium.**—Gellhorn, as a result of his statistics, traces a large proportion of ailments to faulty management of the puerperium. He holds that a puerpera should stay in bed not less than eighteen days, should wear an appropriate bandage, preferably of the Semlink model, that mild methodical exercises started in the second week after confinement and continued for several weeks after patient has left the bed are indispensable to complete restoration, and that every puerpera should be carefully examined six weeks after delivery before being discharged from medical observation.

72. Abstracted in THE JOURNAL, Nov. 28, 1908, p. 1895.

Montreal Medical Journal

January

74 Cerebral Arteriosclerosis. C. K. Russel, Montreal.
75 Cutaneous Manifestation of Tertiary Syphilis. G. G. Campbell, Montreal.
76 Diagnosis of the Commoner Inflammatory Diseases of the Eye. T. A. Woodruff, Chicago.
77 Pott's Paraplegia Cured by the Plaster Bed. J. A. Nutter, Montreal.
78 Aphasia, Auditory and Motor, with Re-education. N. Viner, Montreal.
79 Medicine in Canada. M. C. Charlton.
80 Practical Considerations in Dealing with Pulmonary Tuberculosis. H. Elliott, Toronto.

Journal Michigan State Medical Society, Detroit

January

81 *Treatment of Syphilis and Parasyphilis of the Nervous System. D. Hecht, Chicago.
82 *Penoal Experience with Prostatitis. F. W. Robbins, Detroit.
83 *Three Cases of Lymphatic Leukemia. W. Haughey, Battle Creek.
84 Etiology and Treatment of Nasal Catarrh. J. F. Byington, Battle Creek.

81. **Syphilis of Nervous System.**—Hecht epitomizes his article as follows:

1. Syphilis and parasyphilis of the nervous system continue to stand in direct and indirect causal relation to primary syphilis, although their nosologic position is very likely to undergo revision if the Schaudinn discovery and serodiagnostic values of to-day stand the test of time and further development.
2. The therapeutic position, it is hoped, will also share in this signal advance, but in the expectant interval it is well to insist that neither a routine nor a haphazard administration of antispecifics is commendable.
3. Treatment to be intelligent must meet the requirements of each case, with due regard for the many collateral chiefly supportive measures.
4. Antispecifics, when indicated in these conditions, mean mercury and iodids.
5. In the vast majority of cases occurring in neurologic practice mercury by inunction is the method of choice.
6. The "Frankel exercises" treatment for the ataxia of tabes loses none of its efficiency if a departure is taken from the original complex plan to a simpler one.

82. Abstracted in THE JOURNAL, Aug. 29, 1908, p. 786.

83. Abstracted in THE JOURNAL, Aug. 22, 1908, p. 699.

Journal of the South Carolina Medical Association, Greenville

January

85 Public Schools and Public Health. W. J. Burdell, Lugoff, S. C.
86 Arteriosclerosis. T. A. Quattlebaum, Graniteville, S. C.
87 Relation of Physicians to Each Other. J. G. Duckworth, Anderson, S. C.
88 Relation of Physician to Patient. J. M. Richardson, Anderson, S. C.

American Journal of Surgery, New York

January

89 *Acute Dilatation of the Stomach. C. D. Selby, Toledo, O.
90 *Catarrhal Deafness and its Treatment. A. C. Geyser, New York.
91 Diagnostic Indications of Uterine Bleeding. S. S. Graber, New York.
92 Placenta Praevia Centralis. H. A. Miller, Pittsburg, Pa.
93 Correction of External Nasal Deformities. J. C. Lester, Brooklyn, N. Y.
94 Case of Pulmonary Embolism Following Injection of Salicylate of Mercury in Albolene. E. H. Elsing, New York.
95 Acute Perforating Gastric and Duodenal Ulcer. E. Eliot, New York.

89. **Acute Dilatation of the Stomach.**—Shelby concludes that many cases of acute gastric dilatation on inquiry will be found to originate in splanchnic stimulation superimposed on some chronic malady of the stomach, and aideu by the presence of some fermentative irritant or hypertonic solution in the stomach.

90. Abstracted in THE JOURNAL, Nov. 28, 1908, p. 1990.

Ophthalmic Record, Chicago

January

96 *Treatment of Recurrent Pterygium. H. Gifford, Omaha, Neb.
97 Case of Bilateral Fulminating Glaucoma. R. L. Randolph, Baltimore.
98 *Conditions Under Which the Striæ of Incipient Senile Cataract Appear and Disappear. L. Connor, Detroit.
99 Case of Mikulicz's Disease. R. L. Randolph, Baltimore.

96. **Recurrent Pterygium.**—Gifford contests the opinion expressed by Knapp "that pterygia that have relapsed after one or several operations and have the aspect of keloid scar should not be meddled with." He reports five cases successfully treated by the use of sufficiently large Thiersch or epithelial flaps. His experience indicates that all of these bad cases of recurrent pterygium can be cured by this means. In doing the operation it is important in dissecting back the conjunctiva to clean the cornea and sclera very thoroughly and to be sure that the flap is well attached to the globe before allowing the lids to close. Skin flaps should be very thin and they are best taken from the inner forearm. Their advantage is that they always remain skin, the statements to the contrary notwithstanding. On account of not being subject in the eye to the friction which skin generally gets, they do not clean themselves on the eyeball, and the epidermis collected on the surface not only looks bad, but is likely to cause some irritation. But if carefully wiped every day they look well and give no trouble. Lip and flaps have the disadvantage that, no matter how thin they are cut, they have on the eyeball a slight reddish tinge; they are also more liable to shrink. In practice, Gifford uses lip flaps when, on account of the age or disposition, a slight redness of the eyeball is of no importance, or when he has reason to think instructions as to wiping a skin flap would not be carried out. Slight recurrences in which the conjunctiva grows back on the cornea for a millimeter or two and there stops, require no treatment, but when a pterygium returns and is apparently progressing steadily, a narrow circumcorneal skin flap, as proposed by Dr. F. C. Hotz, will probably effect a cure. Gifford thinks, however, that we can generally more surely prevent recurrence by using a somewhat larger flap, applied as shown by one of his illustrations in this article. Of all the operations for pterygium he finds that of McReynolds the one least liable to be followed by recurrence.

98. **The Striae of Incipient Senile Cataract.**—Connor summarizes his considerations as follows:

1. The striated lenses of incipient senile cataract are the result of disease, coincident with advancing years, but not a necessary

V 19

part thereof (more than cholera infantum, club foot or squint are caused by childhood).

2. This disease is the result of general malnutrition and diminished local immunity or failure of the capsule cells to make lens fibers adequate to fill intercellular gaps by shrinkage of cells adjacent the nucleus.

3. These striated lenses occasionally become clear, either without or with a great variety of treatmeat.

4. In cases of incipient striated senile cataract, every existing cause of general or local malnutrition should be eliminated, and every known agency of promoting general or local nutrition be utilized, that the lens may regain transparency; or that workable vision be retained for the longest period; or to secure the best possible preparation for the shock and traumatism of extraction.

Woman's Medical Journal, Toledo, O.

January

100 Against the Spirochæta Pallida and Diplococcus of Neisser. H. C. Putnam, Providence, R. I.
101 The Eye and Its Diseases, in Relation to the Work of the General Practitioner. M. L. Hurrell, Rochester, N. Y.
102 Thyroid Enlargements. M. E. Dickinson, Rochester, N. Y.

United States Medical Naval Bulletin, Washington

January

103 Artificial Illumination of Naval Vessels—A Study in Naval Hygiene. J. D. Gatewood, U. S. Navy.
104 *Simple Operation for Hemorrhoids. H. F. Hull, U. S. Navy.

104. Hemorrhoids.—Hull describes the following operative technic: After dilating the sphincter, grasp the pile well toward its base with a hemostat, the blades parallel with the long axis of the bowel. It may be necessary to draw out the pile with a tenaculum. Take a strand of No. 2 catgut, 8 or 10 inches long and thread on each end of it a full curved or half curved needle. Start to sew at the upper end of the pile—that is, at the distal end of the clamp, entering one of the needles close to and just beneath the hemostat, about one-eighth of an inch from the extremity of the pile. Draw the thread half through. Bring the thread around the free end of the pile and re-enter the same needle through the same hole and from the original side. Thus a loop will be formed about this end. Follow down along the pile, keeping close to and beneath the hemostat with an ordinary shoemaker's or harnessmaker's stitch, with two needles, making the loops or stitches about one-eighth of an inch apart. This stitch is put in by entering the needles from opposite sides through the same hole and then pulling fairly tight. The last stitch or loop ends one-eighth inch from the proximal end of the clamp, and the two ends are simply pulled tight and tied about this end of the pile. Cut the pile off close to the upper surface of the hemostat, and lastly cut the long end of the threads. Repeat this procedure for each pile. Should any be very large, angry looking, and "bursting" with blood, a back stitch may be taken at about the center of the pile, first pulling tight those stitches already in. A cautery may be used on the raw edge. The after-treatment consists of a suppository of opium and belladonna, a rectal plug of gauze, and rubber dam wrapped about a piece of tubing and left in for two or three days. As soon as the plug is removed an oil enema is given.

Alabama Medical Journal, Birmingham

January

105 Successful Case of Endoaneurismorrhaphy. C. Whelan, Birmingham, Ala.
106 Sexual Neurasthenia. R. C. Bankston, Birmingham.

Chicago Medical Recorder

January

107 *Advisability of Operations During Shock. S. C. Plummer, Chicago.
108 *Treatment of Syphilis and Parasyphilis of the Nervous System. D. Hecht, Chicago.
109 *Relation of Influenza Bacillus to the Disease Influenza. W. S. Harpole, Chicago.
110 Abuse of Medical Charities in Chicago. C. J. Whalen, Chicago.
111 Untoward Results of Middle-Ear Disease. H. M. Hays, New York.
112 Rhachitismus—A Clinical Study. A. C. Wiener, Chicago.

107. Operation During Shock.—Plummer analyzes the expressions of various authorities on the question of operation during shock, and concludes as follows: Do not operate during shock as a rule. Before making exception to this rule, weigh carefully any rare and unusual case under your care; do not too hastily decide that a deviation from the ordinary practice is justified.

108. See Abstract No. 81.

109. Influenza Bacillus.—Harpole traces the history of influenza from 1510, and analyzes the opinions of many physicians thereon. He says that the situation to-day seems to be that we have:

1. Many cases of respiratory disease and febrile disease, in which the influenza bacillus is found in the throat cultures or sputum. These may or may not be cases of influenza of a mild type.

2. There are occasionally cases of severe infection of the body or its various systems in which the course is severe, and even fatal, and the organism found deep in the tissues is unmistakably the influenza bacillus. These cases seem to be undoubted cases of influenza.

3. The germ is found in cases of well-marked whooping cough, scarlet fever, measles, etc., in which the importance of its presence is a question.

4. It is also found in healthy mouths.

It would seem reasonable to believe that the influenza bacillus is a constant guest with us, producing sporadic, and at times epidemic, cases, and at periods, for reasons not understood, gaining a virulence at some point on the earth's surface from which the virulent colonies spread with great rapidity into a pandemic.

Providence Medical Journal

January

113 Vomiting. E. E. Pierce, Providence.
114 Peculiarities of the Stools of Young Children. F. G. Taggart, East Greenwich, R. I.
115 Three Cases of Glaucoma. V. L. Raja, Providence.

St. Louis Medical Review

January

116 *Blood Cultures in Typhoid. L. K. Baldauf, St. Louis.
117 New Laboratory of the University of Berlin. J. W. Marchildon, St. Louis.
118 Carcinoma of the Body of the Uterus. C. C. Vanderbeck, St. Louis.
119 *The Marriage of the Blind from the Standpoint of a Physician. C. Loeb, St. Louis.
120 Development—Physical, Mental, Moral. H. C. Fairbrother, St. Louis.

116. Blood Cultures in Typhoid.—Baldauf discusses the subject in general, dwelling particularly on the work of Coleman and Buxton (*American Journal of Medical Sciences*, June, 1907) whose conclusions he quotes. He has himself been making systematic and routine examinations at the St. Louis City Hospital in suspected typhoid cases, with a view to determining the frequency of bacillemia in typhoid infection and isolating different organisms from several individuals, for he is in agreement with those who believe that there are numerous strains of the typhoid bacillus and that the severity of the symptoms is dependent in many cases on the variety of the organisms. He has used in his work almost exclusively ammonium oxalate solution and Conradi's medium. He describes the technic.

119. Practically the same article, with identical conclusions, was published in the *Annals of Ophthalmology*, January, 1909, and abstracted in THE JOURNAL, February 20, page 663.

Southern California Practitioner, Los Angeles

January

121 Case of Subcutaneous Abscess Caused by the Sporothrix Schenckii. J. M. Burlew, Santa Ana, Cal.
122 Bismuth Paste in Diagnosis and Treatment of Fistulous Tracts. J. K. Swindt, Pomona, Cal.
123 Intravenous Injections in Tuberculosis. C. A. Shepard, Needles, Cal.
124 *Eclampsia, Toxemia and Uremia of Pregnancy. F. H. Redewill, Phoenix, Ariz.
125 Climatology of the Southwest. J. A. Munk, Los Angeles.
126 Care of Tuberculosis Patients at the Los Angeles County Hospital. D. C. Barber, Los Angeles.

124. Eclampsia.—Redewill reports experimental work which demonstrates conclusively, in his opinion, that in every case examined the placenta of an eclamptic woman was highly toxic. Glycerin extracts were made from both the maternal and fetal portions. The fetal extract in 70 per cent. of the cases showed no toxic effect up to ten times the unit of dose, while those injected with the maternal portion containing syncytium showed extreme toxic effects with one unit in every case. Redewill holds that we can accept, therefore, the syncytial theory of the origin of the toxin of eclampsia. The pathologic lesions of eclampsia are primarily necrosis of the periphery of the liver lobules with secondary lesions in the kidneys and brains. In pernicious toxic vomiting of pregnancy, as in acute yellow

atrophy, but less intense, the lesions are principally in the center of the liver lobules. Acute uremia of pregnancy, though of kidney origin, is indirectly produced by torpid activity of the hepatic cells. In determination of kidney and liver activity, the urea and ammonia quantitative tests are far more important than the searching for casts and albumin. To determine, directly, the liver activity, Strauss' levulose test is recommended. In eclampsia with a soft dilated cervix, the uterus should be emptied at once; with a hard, non-dilated cervix, dependence must be on laboratory as well as clinical evidence to determine the condition of patient, and if in critical condition, forcible dilatation and extraction or aseptic Cesarean section is called for. Anesthetics and morphin should be used sparingly. Venesection should be performed in most cases, low pulse alone not being a contraindication (Williams), and hypodermoclysis should be administered.

Ohio State Medical Journal, Columbus

January

127 *Sciatic Pain as an Orthopedic Symptom. A. H. Freiberg, Cincinnati.
128 Management of the Third Stage of Labor. E. W. Doherty, Toledo.
129 Relation of Diseases of Accessory Sinuses of the Nose to Eye Symptoms. J. W. Murphy, Cincinnati.
130 *Potentiality of Habit. C. B. Mills, Marysville.
131 Adherent Prepuce. J. C. Larkin, Hillsboro.

127 and 130. Abstracted in THE JOURNAL, May 23, 1908, pp. 1721, 1723.

Journal of Nervous and Mental Disease, Lancaster, Pa.

January

132 Three Cases of Facial Spasm Treated by Injections of Alcohol. H. T. Patrick, Chicago.
133 *Psychotherapy and the Church. C. B. Farrar, Baltimore.
134 *Hysterical Insanity, with a Special Consideration of Ganser's Symptom Complex. T. Diller and G. J. Wright, Pittsburg, Pa.

133. **Psychotherapy and the Church.**—Farrar criticizes the Emmanuel movement from a materialistic standpoint.

134. Abstracted in THE JOURNAL, July 4, 1908, p. 69.

Journal New Mexico Medical Society, Albuquerque

January

135 Head Injuries. J. R. Espey, Trinidad, Colo.
136 Traumatic Lesions of the Spinal Cord. J. W. Colbert, Albuquerque.
137 Routine Examination of Eyes, Ears, Nose and Throat in School Children. C. S. Losey, East Las Vegas.

Mississippi Medical Monthly, Vicksburg

January

138 Postpartum Hemorrhage. A. P. Alexander, Sledge.
139 Obstetrical Observations. F. M. Brougher, Belen.
140 Etiology of Malarial Hematuria. C. J. Marshal, Lambert.
141 Uses of Digitalis. G. S. Johnson, Belen.

Journal of Medical Research, Boston

December

142 Bacteriolysis of the Gonococcus and of the Meningococcus with Normal and Specific Immune Rabbit Serums. J. C. Torrey, New York.
143 I.—New Para-Dimethyl-Amido-Benzaldehyde Test for Indol. II.—Cholera-Red Reaction as Affected by Mixed Cultures. E. N. Tobey, Boston.
144 Modification of the Technic of Complement Fixation. A. H. Caulfeild, Toronto, Canada.
145 Typhoid Meningitis: Cultivation of *Bacillus typhosus* from Meninges and Mesenteric Lymph Node in a Case of General Paresis, with Note on Experimental Typhoid Meningitis in the Guinea-Pig. E. E. Southard and E. T. F. Richards, Boston.

January

146 *Immunity Production by Inoculation of Increasing Numbers of Bacteria, Beginning with One Living Organism. G. B. Webb and W. W. Williams, Colorado Springs, Colo.
147 *Large White and Soapy Kidney. O. Klotz, Montreal.
148 Origin and Development of Foreign Body Giant Cells. A. Forbes, Boston.
149 *Later Stages of the Repair of Kidney Tissue (Dog), with Special Reference to Proliferation of the Pelvic Epithelium and Heteroplastic Bone Formation. R. M. Pearce, New York.
150 *The Increased Infective Power Produced in Bacteria by Sensitization, with Normal Serum of the Same Species. W. C. White and D. A. L. Graham, Pittsburg.
151 *Value of the Use of Ammonium Oxalate in Blood Culture Technic. C. Ryttenberg, Boston.
152 *General Susceptibility in Typhoid and Colon Infection, as Shown by the Ophthalmic Test. C. Floyd and W. W. Baker, Boston.
153 *A Mucin-Containing Multilocular Cyst of the Ovary. G. McConnell, St. Louis, Mo.

146. **Immunity Production by Inoculation.**—From their work on guinea pigs Webb and Williams conclude that some immunity is produced by beginning with a subcutaneous inoculation of one tubercle bacillus and slowly going up. They regard the method as harmless and suggest that it may prove beneficial in the treatment of established tuberculosis.

147. **Large White or Soapy Kidney.**—In the so-called large white kidney, Klotz finds myelin which contains fatty acids in combination with sodium and potassium—soaps of oleic acid. He could not demonstrate proteids or cholesterin. The large white kidney has usually been considered as fatty kidney, but in reality it would be more of a soapy kidney according to these results.

149. **Repair of Kidney Tissue.**—Pearce finds that in the repair of kidney tissue at the site of injury caused by partial extirpation there is, as a rule, proliferation of the epithelium of the pelvic mucosa and in the underlying connective tissue heteroplastic bone formation may take place.

150. **Increased Infective Power in Bacteria.**—White and Graham cite experiments which appear to them to indicate that the treatment of normal tubercle bacilli with normal rabbit serum increases the infective power of the bacilli for rabbits.

151. **Ammonium Oxalate in Blood Culture Technic.**—Ten cubic centimeters of the following solution, ammonium oxalate 2 grams, sodium chlorid 6 grams, distilled water 1,000 c.c., are put into large test tubes and sterilized for twenty minutes on each of three successive days. The tubes are stored in the ice chest until needed, but fresh solutions should be made every third or fourth week. The oxalate precipitates the calcium salts of the blood thereby preventing coagulation. In the actual work of making blood cultures, from 4 to 8 c.c. or so of blood are introduced into a tube of the oxalate solution and thoroughly mixed together, and this mixture may be used for making plates and inoculating various media. The method is useful as an intermediate step in blood culture, because it permits transportation of the blood from the bedside to the laboratory.

152. **General Susceptibility in Typhoid and Colon Infection.**—Floyd and Barker used a solution of typhoid bacilli prepared according to the method originally employed by Hamburger: The bacilli are grown on agar for twenty-four hours and then suspended in salt solution and the suspension is incubated for four days in order that autolysis may take place. The solution is then sterilized at 60 C. for half an hour, centrifugated for twelve hours and the clear supernatant fluid pipetted off. Hamburger used a solution representing three billion bacilli to the cubic centimeter, but Floyd and Barker regard this solution as too active and use one representing one billion bacilli per cubic centimeter. The test is simple and without danger and gave a definite positive reaction in 96 per cent. of the series studied, often several days before the agglutination reaction could be obtained. Floyd and Barker also studied a colon ophthalmic reaction carried out in the same way as the typhoid, but further work is necessary before its diagnostic value can be established.

153. Abstracted in THE JOURNAL, Jan. 30, 1909, p. 409.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

Lancet, London

January 30

1 *Physiology and Pathology of Work in Compressed Air. Sir T. Oliver.
2 *"Bacillus F": An Organism in a Case of Epidemic Diarrhea. J. Orr, R. S. Williams, H. L. Murray, C. Rundle and A. E. Williams.
3 Primary Squamous-Celled Epithelioma of the Epididymis. R. P. Rowland and G. W. Nicholson.
4 *The Parasite of Kala-Azar and Allied Organisms. W. S. Patton.
5 The Treatment of Syphilis. G. G. S. Taylor.
6 A Typhoid Carrier, Treated Successfully by Inoculation of Typhoid Vaccine. S. T. Irwin and T. Houston.

7 Modification of Excitant for Leucocytes Composed of Methylene Blue and Atropin. H. C. Ross.
8 *Tuberculosis in Children. T. Shennan.

1. **Compressed Air.**—Oliver gives the results of his experience of compressed-air illness, gained during three extensive engineering enterprises in the north of England. He describes the caisson, the phenomena of compression, and the method of decompression when the men leave the caisson. The length of time spent by the men in the working chamber should be inversely proportional to the pressure. The symptoms generally develop after men have come out of the air-lock. There are sudden onset of pains in limbs or abdomen, sickness and vomiting, dizziness, bleeding from the nose or mouth, nervousness, often amounting to terror, unconsciousness, and even paralysis, which last, however, usually passes away, though in one of Oliver's cases the paralysis, which was accompanied by loss of sensation, became permanent. He discusses the explanations that have been given of the causation of the symptoms, the physiology, pathology, prevention and treatment. As to the last, recompression, followed by subsequent slow decompression, appears to be the most effective measure. Working in compressed air should be done only by comparatively young men who are temperate, of spare build, and whose tissues are still elastic.

2. **A Bacillus of Epidemic Diarrhea.**—The authors describe the morphology, staining reaction, cultivation and agglutination experiments, and the results of animal inoculations and feeding experiments in reference to a bacillus recovered from the stools in an epidemic of diarrhea. It is readily differentiated from the *Bacillus typhosus* and other definitely known morbific bacilli, such as Morgan's and the dysentery bacilli. The agglutination reactions appear to show a relation between it and the *Bacillus typhosus* and the paratyphoid bacillus B.

4. **Kala-Azar.**—Patton essays to show that the parasite of kala-azar is a herpetomonad, and that in its flagellate stage it may be indistinguishable from a harmless species; this truth is of importance, because in spite of other data the two closely allied human forms—the parasites of infantile splenomegaly and oriental sore—are still regarded as identical with the parasite of kala-azar.

8. Abstracted in THE JOURNAL, Oct. 17, 1908, p. 1366.

British Medical Journal, London

January 30

9 *Physiology and Pathology of Work in Compressed Air. Sir T. Oliver.
10 *Uses of the Calcium Salts in Various Morbid Conditions. A. P. Luff.
11 *Use of Alkalies in Practical Medicine. E. Smith.
12 Remedial Use of Alcohol. J. MacDonald.
13 Operation at End of Fifth Month for Extrauterine Gestation with Living Fetus. A. Doran.
14 Tubal Pregnancy with Early Operation. H. F. Warner.
15 Perforative Peritonitis Following Typhoid Fever: Operation. Recovery. H. B. Mylvaganam.
16 *Method of Measuring the Systolic Pressure in Man, and the Accuracy of This Method. L. Hill and M. Flack.
17 *Treatment of Inoperable Cancer by Hypochlorites. J. E. A. G. Becker.
18 *Treatment of Cancer with Cocain. R. M. Gilchrist.

9. See Abstract No. 1.

10. **Calcium Salts.**—Luff cites Wright's observations that deficient blood coagulability does not always manifest itself in actual hemorrhages, but may show instead an increased transudation of plasma through the capillary wall—"serous hemorrhage." Examples are urticaria, chilblains, edema of the feet and hands, not due to cardiac, renal or venous troubles, and a certain form of headache known as the lymphatic type. This last occurs more frequently in women, usually as a heavy dull ache in the frontal region, occasionally as a throbbing pain in the frontal and temporal regions. It commonly appears on awaking in the morning, and diminishes in intensity or disappears after a few hours. It is most intractable. The subjects of it are usually of the lymphatic type, with a tendency to slight edema of the face, eyelids, hands and feet. Ross suggested the administration of a calcium salt to increase the coagulability of the blood, and demonstrates that the decalcification of the blood, with consequent diminution of coagulability, which can be brought about by potassium citrate, caused a reappearance of the headaches. During nine years Luff has treated 121 cases of deficient blood coagulability with calcium salts, usually with the best effects. The conditions treated included headache, chilblains, boils, urticaria, flushing of the face, aneurism of the aorta, hemoglobinuria, edema of the feet on exertion, vesicular or bullous eruptions, and certain skin conditions—erythema, lichen-planus, gouty pruritus, pruritus ani, and offensive perspiration. He uses for adults calcium lactate, 15 grains (1 gram) in a fluid ounce of chloroform water, with from a half to one minim of tincture of capsicum, three times a day, one hour before meals. The constipation caused by the drug must be controlled, for which purpose salines should not be used, owing to their precipitant action on calcium salts. He has found an effusion of senna pods taken at bed time the most useful laxative.

11. **Alkalies in Medicine.**—Smith says that valuable and widely used as alkalies are in medicine, they must be used with discretion, for appropriate conditions, and on a definite plan. Taken before meals they have a local action. They should be prescribed only in moderate doses and be discontinued as soon as their administration has ceased to be obviously beneficial. They have a local action, both on the stomach and bowels, which, however, appears to be due not so much to their chemical action on the gastric contents as to their undoubted influence in restoring the deranged mucous membrane to a normal condition. Their effect is not limited to this local action, however, for, when used with judgment, they seem to have the power of influencing the whole system for good and setting up a favorable change, which is not always a merely transitory improvement. In gastric derangements, sodium and potassium bicarbonate are probably equally good. From 10 to 20 grains are usually sufficient for adults (for children, from 5 to 10 grains), and it adds to the curative value to combine in each dose a few grains of sodium chlorid. Smith finds the addition of two or three minims of tincture of colchicum seeds, useful in cases of dyspepsia. If there is great irritability of the stomach the alkalies should be made to effervesce with citric acid. The caustic alkalies—liquor potassæ and liquor sodæ—have a more decided sedative action on the stomach than the bicarbonates. Long courses of alkalies are rarely of service in the management of ordinary flatulent dyspepsia. In addition to the salts of potassium and sodium, the heavy carbonate of magnesium and calcium carbonate are very useful. When the object is to neutralize the acid in the cecum the insoluble alkalies are to be made use of, for these are likely to pass unaltered through the stomach and reach the lower bowel unchanged. Smith discusses the uses of alkalies in the treatment of urinary acidity and the discharge of sand and gravel, in the painful cramps which often affect the habitual dyspeptic, especially at night, in suppression of urine, in viscid bronchitis, and the use of sodium citrate in infant feeding.

16. **The Systolic Pressure in Man.**—Hill and Flack, in view of the doubt recently expressed as to the accuracy of the obliteration method of measuring the systolic blood pressure, have tested it in man in two different ways, and both ways, so far as the authors' tests go, show that the method is an accurate one. They describe the methods.

17. **Inoperable Cancer.**—Becker reports three cases of inoperable cancer in which great improvement followed treatment by injection of a solution of potassium and sodium hypochlorite. The periods elapsing between the recognition of the condition and the date of writing—at which period each patient was apparently in good health—are five and one-half years, eighteen months and over four years. The diagnosis was verified microscopically in 2 of the 3 cases. The solution is prepared by dissolving 5 grams of potassium hydroxid and 4 grams of sodium hydroxid in a liter of distilled water, and passing it through washed chlorin gas. Of this solution, 1.5 to 2 c.cm. were injected daily for a varying period, usually under the skin over the deltoid muscle or over the great trochanter, so that the solution might enter the system at a site in the general neighborhood of the lymphatic glands. The growth itself and the skin over it were carefully avoided. So, too, was the use of alcohol during treatment.

15. **Cocain in Cancer.**—Gilchrist reports fourteen cases of various forms of cancer, mainly uterine or breast, treated by cocain administered internally, and where practicable applied locally also. The author makes the following remarks:

1. In every case the general constitutional condition of the patient was very much improved, even if only for a time.
2. From the observations made in these cases, it may be considered, so far as the relief of pain is concerned, that cocain stands unrivaled, for while easing, or altogether taking away pain, there are none of the objectionable conditions which opiates produce.
3. In every case of uterine cancer in which hemorrhage was a prominent symptom, the administration of cocain was followed by immediate benefit; either stopping the flooding entirely or leaving only at intervals a show.

Medical Press and Circular, London

January 27

19 *Peroneal Type of Muscular Atrophy. A. Whiting.
20 Incontinence of Urine Associated with Epispadias. R. P. Rowlands.
21 Ten Cases of Operation for Perforated Gastric Ulcer. C. Morton.
22 Some Gonorrheal Diseases of the Eye. S. Stephenson.

19. **Peroneal Type of Muscular Atrophy.**—Whiting summarizes the pathologic findings of the more recent investigations by saying that several have found degeneration of peripheral nerves, muscles and posterior columns of the cord; some have found lesions both of the posterior horns and the anterior horns, and a few have observed a hypertrophy of the interstitial substance of the nerves. Muscular atrophy is by no means unknown in unequivocal cases of tabes dorsalis. As to sex frequency, it is usually said that males are more frequently affected than females as five to one, but in the case of the family he describes in his paper that does not appear to be the case; indeed, the heredity seems to follow the rule in certain other nervous disorders of transmission, from the mother to the son, and the father to the daughter. In reference to etiology, it is clear that there is an inherited vulnerability, to say the least, of nearly the whole of the lower nervous system, and, indeed, possibly also of the higher, as an erratic, bizarre, excitable psychology is held by some to be characteristic of the disease. In this respect it seems closely to resemble Friedriech's hereditary ataxia. In addition to this predisposing cause, there is clear evidence that in many cases there is also an exciting cause, usually in the form of some acute, specific fever, particularly, as the case records seem to suggest, measles; but other toxic agents such as alcohol and lead, have been held to participate, and even conditions of muscular and mental stress have seemed to have a share in the development of the disease. Up to the present, effective treatment may be summed up in almost a word, namely, well-directed tenotomies; any other is of little avail.

Clinical Journal, London

January 27

23 Appendicitis and Its Treatment. T. H. Openshaw.
24 Diseases, Not of the Stomach, Which Are Liable to Produce Misleading Gastric Symptoms. A. E. Maylard.

Journal of Tropical Medicine and Hygiene, London

January 15

25 Trypanosomiasis and the Geographic Distribution of Some of the Blood-Sucking Insects. J. E. S. Old.
26 Hemogregarines of Snakes (to be continued). L. W. Sambon.

Annales de l'Institut Pasteur, Paris

December, XXII, No. 12, pp. 929-1040

27 *Research on the Intestinal Flora. E. Metchnikoff.
28 *Ankylostomiasis and Beriberi in Cochin China. F. Noc. Commenced in No. 11.
29 Filtration of Certain Proteolytic Diastases Through Collodion Membranes. F. Strada.
30 Piroplasmoses of Cattle in Indochina. H. Schein.

27. **The Intestinal Flora.**—Metchnikoff protests against Finkelstein's conception of the intestinal disturbances of infants as due exclusively to dietetic disturbances—alimentary intoxication. Finkelstein's main argument is that this alimentary intoxication is not connected with any special bacterial flora, as he found this so diverse in the different cases, while the influence of the food was constant and pronounced. Metchnikoff points out that the secretions of the bacteria differ with different food; if a little fecal matter is placed in two tubes, one of which contains chopped meat in water and the other chopped vegetables in water, the fluid in the first jar after two days becomes extremely poisonous for rabbits, while the fluid in the second is entirely harmless for them. The bacterial products are thus different in the two tubes, although derived from the identical source. He then reports personal research on the microbes of putrefaction and their toxic products, especially the anaërobes, *Bacillus putrificus* and *B. perfringens* or *welchii*. He has demonstrated that these anaërobes are a source of autointoxication against which the organism should struggle with all the means at its disposal. It is precisely during the first few days of the development of these putrefaction anaërobes that their products are the most intensely toxic. This is interesting in view of the frequently proclaimed fact that the putrefaction in the intestine is only the first stage of the putrefactions observed outside the human body. He shows further the analogy between the proteolytic flora in the intestine and putrefactions in general, wherever encountered, and states that this constitutes a new argument in favor of the pathologic importance of the putrefaction microbes in the human organism.

28. **Beriberi Due to the Ankylostomum.**—Noc is convinced that the *Necator americanus* is partially responsible for the syndrome known as beriberi, its action supplemented by the lack of sufficient nourishment. The toxic secretions of the parasite seem to accumulate in the system and render the blood serum hemolytic. Repeated ingestion of the larvæ of the hookworm plus the usual Annamite diet is liable to induce the syndrome of beriberi. Thymol cures the disease readily and completely when it is of recent origin, but it is useless when the lesions of degeneration are far advanced. Intoxication from the ankylostomum in its various forms is an extremely serious endemic in the Orient. Prophylactic treatment of ankylostomiasis and improvement of the ordinary diet, which contains too little nitrogen and fat, will aid in exterminating this scourge. When carefully treated with thymol and the reflexes fail to return promptly, the patient must be regarded as incurable. He gives the thymol in two doses of 4 gm. or 6 gm. (60 or 90 grains) each, with an interval of from four to eight days; each dose is preceded by a jalap or calomel purge, the patient being on a strict milk diet, careful to refrain from castor oil and alcohol. He has applied this treatment in numerous cases of beriberi; 47 out of one series of 58 patients were cured and 5 others failed to complete the course. The hospital at Choquan has had from 410 to 1,227 beriberi patients every year since 1900, the mortality ranging from 22.14 to 41.61. A number of young men under 25 had the paralytic or mixed form, with pain in the legs and loss of the knee-jerk, but little or no edema, only a few weeks having elapsed since the onset of the disease. All these patients were promptly and completely cured. In the older cases the lesions of the nerves, heart, lungs and liver proved irreparable.

Annales de Médecine et Chirurgie Infantiles, Paris

January 1, XIII, No. 1, pp. 1-36

31 *Undescended Testicles. (L'ectopie testiculaire.) Villemin.
32 Rectal Injections of Seawater in Treatment of Infantile Gastroenteritis. (Nouveau mode d'administration du sérum de Quinton dans les gastro-entérites infantiles.) E. Gaujoux.
33 *Asystoly in Children. (Asystolie chez les enfants.) A. Mousous.
34 *Treatment of Burns. (Traitement des brulures.) J. Lucas-Championnière.

31. **Diagnosis and Treatment of Undescended Testicles.**—Villemin does not advocate operating on very young children free from complicating hernia or pain or when the testicle is in the abdomen or behind the peritoneum. On the other hand, he operates when there is concomitant hernia or pain as soon as the child has learned not to soil himself. There is little prospect after the age of 10 for spontaneous descent of the testicle. If the testicle slides into some other abnormal location intervention should not be delayed. Gentle, slow massage, frequently repeated, may sometimes force the testicle down into the scrotum. In case of failure, operative measures are indicated when the child is approaching the age of 10. The tendency to hernia must be corrected and the fibrous tissue retaining the testicle must be severed. The best way to

V 19

retain the testicle in the scrotum is to unite it with the other testicle. Then any attempt of one testicle to slide back upward is prevented by the other testicle as they reach the root of the penis. He has done this operation more than three hundred times since 1899, and the results have been very satisfactory. Of course the operation is unable to render functionally perfect a congenitally defective testicle, but in every case the pain and the nervous symptoms were abolished.

33. **Asystoly in Children.**—Moussous regards the localization of the disturbances in the liver and the more rapid course as the special characteristics which distinguish asystoly in children from that in adults. When there is pericardial adhesion the liver dominates the syndrome to such an extent as even to divert attention from the heart. The defective functioning of the liver and the hampered portal circulation entail serious digestive trouble and ascites follows. Repeated punctures may relieve and prolong life for a year or so; a few cases are on record of survival for eight or ten years. The rheumatism or tuberculosis responsible for the asystoly in the first place adds its injurious action on the peritoneum, and the child is liable to fall an easy victim to some intercurrent infection.

34. **Treatment of Burns.**—Championnière protests against the usual treatment of burns with irritating substances which aggravate the condition or permit intoxication from absorption of drugs applied to the wounded area. For this reason he never allows a sedative to be applied to the burn; if one is absolutely necessary, he prefers an injection of morphin. He cleanses the region around with a hot strong solution of carbolic acid, empties the blisters, and swabs the burned surface with a sponge dipped in a carbolic acid solution but so lightly as not to tear the epidermis. A piece of linen in which holes have been cut is spread with a salve and applied to the burned area; over this is laid another piece of linen and cotton to keep out the air, then a bandage to hold all in place. The cotton must be changed every day without fail. Great care should be taken to preserve the epidermis. The salve he has been using for years is petrolatum, 100 gm. (3 ounces), with 15 drops each of essential oil of thyme, of geranium, of vervain and of origanum. This mixture has a soothing and disinfecting action and promotes rapid healing. When unable to obtain the ingredients for this he uses a mixture of 100 parts petrolatum with 10 parts pulverized boric acid and 1 part balsam of Peru. Years of experience have confirmed the value of this technic. He adds that impregnation of a large eschar with zinc chlorid will ward off infection of the eschar, and that tar may prove useful as an application to parts doomed to mortify.

Presse Médicale, Paris

January 16, XVII, No. 5, pp. 33-48

35 *Suprapubic Prostatectomy. (Prostatectomie sus-pubienne.) G. Marion.
36 The Outlook for Pharmacodynamics. (Le devenir de la pharmacodynamie.) A. Martinet.
37 *Recurring Coryza and Autointoxication. P. Cornet.
38 *Action of Gonococcus Vaccine in Gonococcal Joint Affections. (Action du vaccin gonococcique sur les arthrites à gonocoques.) C. Mainini.

January 20, No. 6, pp. 49-56

39 Light Colored Liver Cells. (Les cellules hépatiques claires. Leur nombre relatif à l'état normal. Leur charge glycogénée.) A. Gilbert and J. Jouier.
40 Variations and Measurement of Muscle Tonus. The Myotonometer. P. Hartenberg.

35. **Suprapubic Prostatectomy.**—Marion discusses the indications and contraindications for prostatectomy, and reviews the technic by the suprapubic route, advocating permanent drainage by means of a short piece of wide rubber tubing to the side of which is fastened the sound connected with the irrigator. An elbow-shaped glass tube fits into the short wide drain tube; the latter is perforated near the bottom. The outer end of the glass tube is fitted with a rubber tube conveying away the fluids when the drain is inserted in the bladder through the suprapubic incision. A retention catheter is liable to become plugged with clots, which danger is avoided with this method of drainage, which also does away with the contact of the catheter against the raw surfaces. As soon as the patient is returned to bed the continuous irrigation is commenced; from 20 to 40 quarts or more of cold boiled water are allowed to flow through the drain into and out of the bladder each day. It should be arranged in such a way that the dressings are kept dry and thus do not need renewing for three or four days at a time. The irrigator is placed two or three feet above the level of the bed, the flow being controlled by a clamp in the tube. If the outflow becomes arrested, clots must have got into the drain tube; by removing the glass elbow it is possible to fish up the clots in the drain with forceps. The continuous irrigation not only washes out clots and arrests hemorrhage, but it prevents infection from stagnating urine and clots in some raw pocket. He keeps up this irrigation for three, five or ten days, substituting a smaller, right-angled drain when healing is progressing smoothly, and then he commences to rinse out the bladder daily through the urethra. It is easy for the catheter to go astray behind the spur left from the prostate, and he warns that a guide is necessary to ensure its safe entrance into the bladder. He has treated 18 patients in this way, with invariably good results. One of the men insisted on pulling out his tubes and going to the toilet room every day, and his convalescence was unusually brief. As a rule, Marion lets his patients get up on the eighth or twelfth day. This continuous irrigation has robbed prostatectomy, he is convinced, of its former seriousness. One of the proofs of this is that the other "prostatics" clamor for an operation when they see the excellent condition of those operated on. The operation itself, he adds, is by no means so important as the after-care. The article is illustrated.

37. **Recurring Coryza a Manifestation of Autointoxication.**—Cornet presents numerous arguments to sustain his view that recurring coryza, from simple "colds in the head" to pronounced hay fever, is merely one of the manifestations of the arthritic diathesis, that is, of a family tendency to sluggish elimination of waste products and toxins. He points out that the mucosa of the nose is an excreting organ, and the excretion through this mucosa of some of the toxins generated in the digestive tract may be one factor in recurring coryza. He has had a number of instances in his experience in which an error in diet was promptly followed by an attack of coryza. It is like the congestion observed in the face during difficult digestion. Reflex irritation from the digestive tract distends the vessels, heats and reddens the face, and by stimulating the glands renders the skin greasy and pimply. This same process in the nasal mucosa induces swelling, congestion and excessive secretion; the nerve fibers in the mucosa become irritated from the recurring or continuous autointoxication and the consequent hyperesthesia renders them peculiarly sensitive to dust inhaled or changes in temperature. He has found regulation of the diet, especially avoidance of meat and alcohol, the most effectual means of curing such patients. A little white meat at noonday is all he allows. If local measures are deemed necessary, he applies the actual cautery to the hypersensitive points. The cauterization must be deep enough to destroy the nerve filaments, but this alone is futile unless the underlying autointoxication is combated. The hypersensitive points in the nose are mainly the protruding points where lodge the inspired dust and microbes.

38. **Antigonococcus Vaccine and Gonococcal Arthritis.**—Mainini describes the simple technic for making the vaccine from an emulsion of gonococci, and then reports its application in six cases. It arrests the pain in the true gonococcus arthritis, but it did not seem to modify the course of the affection. He suggests that this specific action on the pain might be useful for differentiation in dubious cases of joint affections.

Semaine Médicale, Paris

January 20, XXIX, No. 3, pp. 25-36

41 Behavior of Spleen and Liver in Acute Malaria. (Le syndrome splêno-hépatique dans le paludisme aigu.) A. Chauffard.

January 27, No. 4, pp. 37-48

42 Inhalation the Only Possible Source of Tuberculosis of the Lungs in Nearly Every Instance. (Impossibilité de la propagation de la tuberculose au poumon par la voie lymphatique.) J. Lhermitte.

Archiv für Kinderheilkunde, Stuttgart

XLIX, Nos. 3-4, pp. 161-320. Last indexed July 4, 1908, p. 82

43 Lactalbumin. (Zur Geschichte und Kenntniss des Milchalbumins.) P. Bergell. Id. (Versuche mit Albulactin bei künstlich genährten Säuglingen.) J. Cassell and H. Kamnitzer.
44 *Tuberculin Reactions, Especially the Ear Reaction. (Auriculoreaction.) V. Tedeschi.
45 Obscure Cases of Infectious Intestinal Affections. (Enteritis, Dysenterie, Pseudodysenterie, Paratyphus, Typhus, etc.) A. Baginsky.
46 *Albuminuria From Curvature of the Spine. (Ueber lordotische Albuminurie.) H. Nothmann.
47 Treatment of Paralytic Talipes Equino-varus. W. Sochaczewski.

44. **The Ear Tuberculin Reaction.**—Tedeschi uses the extremely vascular and comparatively transparent surface of the ear for application of the tuberculin to induce a specific local reaction. Its absolute harmlessness commends this technic, he says, while the test has the advantage of precision and allows better recognition of the specific induration in the depths of the tissues; the whole reaction seems to be more typical and permits more accurate dosage.

46. **Curvature of Spine Responsible for Orthostatic Albuminuria.**—Jehle announced a short time ago that he had found more or less curvature of the spine in all the cases of "orthostatic" albuminuria in his experience, and believed that the curvature was responsible for the albuminuria. This assumption was confirmed by the fact that he succeeded in inducing the "orthostatic" albuminuria in healthy children, previously free from any such tendency, by merely artificially inducing a curvature in the spine. When the children sit or recline, there is no lordosis and the kidneys functionate normally, but when they stand up, the weakness of the muscles causes the spine to curve in the lumbar region and the kidneys have to work under abnormal conditions on that account. If the muscles are strengthened or supported, the sole of the shoe made a little thicker or a supporting corset worn, the tendency to albuminuria is corrected. Nothmann states that he has witnessed the development of albuminuria in cases of progressing lordosis, and has also succeeded in inducing the production of albuminuria by artificially induced lordosis. He reports a number of cases of children convalescing from scarlet fever with traces of kidney disturbance; in all such cases albuminuria promptly followed when the spine was artificially incurved. In another series of scarlet fever children it was impossible to elicit albuminuria by the artificial lordosis, and the kidneys of these children at the time and later have always been apparently absolutely healthy. He has been experimenting on rabbits and on the cadaver to see the effect on the kidneys of curvature of the lumbar spine, and has found that the incurved vertebræ protrude into the space between the kidneys, push them apart and twist them around on the vertical axis, amply explaining the disturbances in circulation evidently responsible for the albuminuria. He thinks it should properly be called "lordotic albuminuria" instead of "orthostatic." If the kidney is at all pathologic, albuminuria is more readily induced than in a sound organ.

Berliner klinische Wochenschrift

January 25, XLVI, No. 4, pp. 141-188

48 Fatal Hemoptysis from Bursting of Aneurisms in Non-tuberculous Bronchiectasis. H. Chiari.
49 *Treatment of Rhinoscleroma with Roentgen Rays. A. R. Rydygier, Jr.
50 *Direct Visual Inspection of Sigmoid Flexure. (Zur Sigmoskopie.) H. Strauss.
51 Serodiagnosis of Syphilis. C. Bruhns and L. Halberstaedter. Id. E. Meirowsky.
52 Treatment of Strictures in the Urethra. (Behandlung schwerer Harnröhrenstrikturen.) J. Cohn.
53 Determination of Antipyritic Power of Blood. (Verbessertes Verfahren zur Bestimmung der antitryptischen Kraft des Blutes.) Marcus.
54 Contagious Fowl Leukemia. (Zur Kenntniss der übertragbaren Hühnerleukämie.) H. Hirshfeld and M. Jacoby.
55 Radium Cataphoresis. F. L. Kohlrausch and C. Mayer.
56 Determination of Size of Blood Corpuscles. (Bestimmung des Blutkörperchenvolumens.) M. Bönniger.

49. **Roentgen Treatment of Rhinoscleroma.**—Rydygier has treated 14 patients with rhinoscleroma by applying the Roentgen rays directly or to the external skin, and states that it is thus possible to effect a complete cure. Most of his patients were women and all were from the poorer classes. In one of the typical cases described, the scleromatous masses obstructed and deformed the nose and extended into the palate. The nose and upper lip and the palate through the open mouth were exposed to the rays for two minutes daily. This was kept up for 16 days and resumed after 16 days for 12 days, followed by another interval of 16 days, resuming the exposures for 18 and then for 16 days with the same intervals of suspension. The rhinoscleroma gradually subsided and disappeared and the nasal passages became normally permeable, with no recurrence during the five years since. He used a medium soft tube, with a current of 32 volts and 2 or 3 amperes. When the rays were filtered through tin foil, the exposures were made for four minutes instead of two.

50. **Sigmoidoscopy.**—Strauss gives an illustrated description of a manikin for teaching the technic of direct visual inspection of the sigmoid flexure and of the sigmoidoscope he prefers, and also illustrates a case of primary double carcinoma in the sigmoid flexure. The malignant nature of the affection was determined by direct visual inspection and the stretch of bowel involved was resected in time to save the patient. The case further emphasizes the importance of inspecting the sigmoid flexure even when lesions are found in the rectum presumably sufficient to explain the symptoms observed. In this case, palpation gave negative findings, while a hemorrhagic proctitis served to explain the bleeding. The introduction of the sigmoidoscope was painful and difficult and was given up after two attempts, especially as the opening seemed to be normal and the patient, a man of 65, had arteriosclerosis and required careful measures. The stool was normal except for traces of mucus and blood. Under local treatment of the proctitis, conditions improved, so that the man was free from symptoms for two months, but then more blood appeared in the stool and the sigmoidoscope cleared up the diagnosis at once, a scrap removed showing the malignant nature of the lesion discovered. The patient was in the best of health at time case was reported, six weeks after the excision of the tract involved. The difficulty experienced in introducing the sigmoidoscope in some cases shows the necessity for practice, and for this Strauss has devised a very practical manikin. He advises using a sigmoidoscope in which the lamp is outside, the light being reflected into the tube, thus avoiding soiling or injury of the lamp from matters passing through the tube.

Deutsche medizinische Wochenschrift, Berlin

January 21, XXXV, No. 3, pp. 89-136

57 *Fat Infiltration and Degeneration in the Kidneys. (Verfettung der Nieren.) G. Klemperer.
58 *Infusoria in Stomach Affections. (Infusorien bei gut- und bösartigen Magenleiden nebst Bemerkungen über die sogenannte Infusorienenteritis.) P. Cohnheim.
59 *Xanthomatosis with Chronic Jaundice. (Symptomatische Xanthome bei chronischem Ikterus.) O. Posner.
60 Disturbances in Orientation. (Orientierungsstörungen.) R. Wahle.
61 *Surgical Treatment of Idiopathic Renal Hemorrhage. (Sogenannte essentielle Nierenblutungen.) Treplin.
62 Nature and Importance of Pathologic Electrophysiology. H. Boruttau.
63 Immunizing Action of Lecithin Bacterial Extracts. (Bakterielle Lecithinauszüge.) R. Bassenge.
64 *Acquired Diverticula in Large Intestine. (Zur Pathologie und Therapie der falschen (erworbenen) Divertikel des Dickdarms.) F. Franke.

57. **Fat in the Urine.**—Klemperer has been studying fat degeneration of the kidneys and was able to demonstrate in the case of a young suicide that fat is liable to infiltrate into the kidney tissue even when the latter is healthy. The discovery of fat particles in the kidney urine is not necessarily, therefore, a sign of grave prognosis. When they occur in large amounts, however, it is a sign of a necrotic process in the kidney cells. During the necrotic process the lipoid substances undergo some transformation which renders them visible; to this he applies the term fat "phanerosis."

58. **Infusoria in Stomach Affections.**—Cohnheim, continuing his researches in this line, has found that the presence of flagellates in the stomach is a presumptive sign of achylia from some malignant process, although in exceptional cases they may be found with achylia from some benign affection. When found in the stool they indicate some primary stomach

affection. He does not believe that the infusoria have pathologic properties. He gives the details of six cases of cancer of the stomach or esophagus in which the infusoria were found, as also in a case diagnosed latent cancer, but this was disproved by the latter course of the case. The infusoria were not an early sign in any instance.

59. **Xanthomas in Chronic Jaundice.**—Posner's patient was a woman of 37 with cirrhosis of the liver and jaundice but no ascites. Generalized xanthomatosis developed, accompanied by intense pruritus during exacerbations. None of the xanthomas showed any tendency to retrogress; they developed symmetrically and predominantly on parts exposed to friction. Carlsbad and other mineral waters gave no relief, and treatment had to be merely symptomatic.

61. **Surgical Treatment of Idiopathic Hemorrhage from the Kidney.**—Treplin's patient had mild nephritis in the course of osteomyelitis, and serious hemorrhage occurred in the affected kidney. The patient was a boy of 16, and on the days when the urine contained most blood he complained of pain in the kidney region and the organ could be felt much enlarged. Treplin exposed and decapsulated the swollen and dark red kidney, then sutured the incision, as nothing else pathologic was found. The urine contained blood for two more days, then it cleared and the patient rapidly recovered with no further symptoms from the kidneys. Treplin would not hesitate to decapsulate both kidneys in such a case if there was hemorrhage from both.

64. **Pathology and Therapy of Acquired Diverticula in Large Intestine.**—Franke's article is a complete study of this subject which he thinks is very important. The symptoms caused by these false diverticula are essentially the same as those of appendicitis, the conditions being approximately the same in each. Sometimes the resemblance is so striking that the appendix is supposed to be on the left side in the special case. In some instances the syndrome caused by the false diverticulum has been ascribed to cancer. In one such case seventeen years ago he found the sigmoid flexure, rectum and bladder so involved in the supposed cancer that he sutured the abdomen without attempting to remove the growth. The patient, a man, gradually recuperated and the tumor subsided completely, so that he lived in good health for many years afterward. Franke accepted the case then as the spontaneous cure of a carcinoma in consequence of the laparotomy, but now he is confident that the whole trouble was one of these acquired diverticula, the disturbances from which gradually retrogressed, as he has had opportunity to observe in a number of similar cases since. When the diverticulum is in the small intestine it seldom causes any trouble—only one case of the kind is on record; when near the appendix the syndrome is that of ordinary appendicitis. The sigmoid flexure is the main location for the disturbances from this cause. In Telling's compilation of 105 cases, clinical symptoms had been noted in 63, while in 42 the diverticulum was an autopsy surprise. In 16 cases there was adhesion to the bladder, and there was a fistula in 11. In one case in Franke's experience, a woman about 35 had been ailing and feverish for some time, with a tendency to diarrhea. He diagnosed intestinal tuberculosis and prescribed a mixture of bismuth and calcium carbonate with opium. Fecal matter was passed with the urine for a time, but then the condition began to improve and the patient has been in good health during the fourteen years since. He now explains the case as a diverticulitis with adhesion of the flexure to the bladder and perforation, the fistula gradually healing spontaneously. The development of a cancer at the site of a diverticulum has been reported only three times. He discusses the differential diagnosis, the syndrome varying within wide range, and the tumefaction assuming numerous shapes. It is possible, he adds, that irritation from a foreign body may cause a similar syndrome, as in a case in his own experience, treated by resection of the flexure, but no traces of the assumed cancer nor of a diverticulum were detected, merely a small foreign body. In another case he was able to diagnose the false diverticulum syndrome and operate during the incipient stage of trouble. The patient was a typesetter of 45 who for years had suffered apparently from chronic colitis or sigmoiditis, with infiltration and hyperplasia. The laparotomy failed to disclose any traces of inflammation in the colon or flexure, but nearly 100 diverticula were found scattered throughout the intestines, a large number being in the sigmoid region. He explains the serious syndrome induced as the result of the efforts of the diverticula to empty themselves of fecal substance finding its way into them. As the mouths of the diverticula were small, considerable effort was required to evacuate them, and the spasmodic contractions of their musculature caused irritation in them which spread to the bowel outside. In the reported case diarrhea still persists, which he attributes to the diverticula left in the bowel above. The sigmoid flexure formed a sausage-like tumor, and he resected about 9 inches, with end-to-end suture of the large intestine. The patient has been in good health since. The case demonstrates that these diverticula, even without much inflammation, may yet cause an obstinate affection otherwise inexplicable. The case further shows that constipation or ileus need not necessarily accompany these diverticula, but rather that years of incessant diarrhea may result, and yet that notwithstanding these years of irritation, inflammation need not necessarily follow. It is probable that in his case inflammation would have developed in time with the syndrome usually supposed to be characteristic of this diverticulum formation. Franke regards these diverticula as responsible for many intestinal affections, whose origin and cause have hitherto been unexplained; not only for acute and chronic colitis and sigmoiditis, but tumor formation, suppuration and abscesses, with perforation into the abdominal cavity or into adjacent organs. He advises an exploratory laparotomy in all dubious cases or when internal measures fail.

Deutsche Zeitschrift für Chirurgie, Leipsic

December, XCVII, Nos. 1-2, pp. 1-175

65 *Tuberculosis of the Joints. (Gelenktuberkulose.) K. Vogel.
66 Errors in Clinical Measurement of Degree of Genu Valgum. (Fehlergrösse bei der klinischen Bestimmung des Kniebasiswinkels.) A. Hoffmann.
67 Action of Ether on the Hemoglobin and Red Corpuscles During General Anesthesia in Man and Rabbits. (Neuere Untersuchungen über die Einwirkung des Aethers auf Hämoglobin und rote Blutkörperchen während der Narkose am Menschen und Kaninchen.) M. Bloch.
68 Grouping of the Motor Tracts in the Lateral Columns of the Pyramids. (Läsion durch Kugel.) H. J. Hällström.

65. **Tuberculous Joint Affections.**—Vogel was assistant at Bonn to Schede, later to Bier and still more recently to Garré, and devotes 127 pages to a review of his experience with 349 cases of tuberculosis of the shoulder, elbow, wrist, hip, knee and ankle. Most of the patients have been examined again recently. The knee and hip joint seem to be predisposed to a tuberculous affection only during early life; the tissues become too tough later to favor the development of the tubercle bacillus. On the other hand, the small multiple joints retain their youthful conditions through life and are thus liable to tuberculous invasion even into advanced age. In 2 cases the tuberculous affection was ascribed to vaccination; in some traumatism was incriminated, but it was always comparatively slight. A serious trauma seems to summon such quantities of defensive agents to the spot that a tuberculous affection rarely results—a slight trauma, on the other hand, offers favorable conditions for the tubercle bacillus. Tuberculin and cinnamic acid treatment proved disappointing, but excellent results were obtained with constriction hyperemia and Vogel commends this method of treatment as by far the simplest and easiest for the patient and the most effectual in its results, although it requires exceptional judgment and attention on the part of the physician in charge of the case. He never leaves it to another unless exceptionally to some particularly intelligent and conscientious trained nurse. Bier's instructions were minutely followed; the simple rubber band, 2 or 3 inches wide, was applied for an hour morning and evening, sometimes with a layer of gauze beneath. The limb is placed as comfortably as possible, and everything else removed that could bind it in any way. This method of treatment applied to the knee gives as good results as iodoform injection, while the functional results are far better. In every

case of elbow, ankle and wrist tuberculosis the cure was complete under this treatment, with no ankylosis. An abscess is not regarded as a serious complication. The age of the patient is immaterial, Bier and his followers obtaining just as good results in patients over 30 as in those under 20. Another point is that they are not discouraged into abandoning this method of treatment too soon or when there is a transient aggravation of the condition. Each case requires individual study and adaptation of the method, and Vogel confesses that he has not obtained quite such good results since he has ceased to be an assistant and has been treating patients independently. In one of the cases related, a woman of 26 had a severe tuberculous affection of the wrist which was lax, crepitating, much swollen and with several suppurating fistulas; the fingers were rigid. The patient remained a year in the hospital, and under the constriction hyperemia the process gradually retrogressed after elimination of several sequesters; the fingers became flexible and there is nothing left now but one small fistula with slight exudation. If a patient has to leave the hospital before the cure is complete, he has the mother or some member of the family trained to continue the constriction, supervising them until convinced of their skill. The patient should return to the hospital occasionally for examination, especially when any change is to be made in the treatment. Some of his patients sent their family physician to learn the special points.

Fortschritte der Medizin, Leipsic

November 20, XXVI, No. 32, pp. 1025-1056

69 Alcohol and Epilepsy. H. Vogt. (Commenced in No. 31.)
December 36, No. 36, pp. 1153-1192
70 Dirt in Milk and How to Keep It Out. (Ueber Milchschmutz und seine Bekämpfung.) Seiffert. (Commenced in No. 34.)
January 10, XXVII, No. 1, pp. 1-58
71 *Treatment of Tardy Contracture in Hemiplegia. (Behandlung der Spätkontrakturen der Hemiplegiker.) von Criegern.
72 *Stenosis of the Pylorus in Infants. (Ueber die sog. Pylorusstenose der Säuglinge.) I. Steinhardt.

71. Treatment of Tardy Contracture in Hemiplegia.—Criegern describes a simple method of treating the contractures which develop from two to four weeks or later after the onset of the hemiplegia. He analyzes the phenomena which occur when a person unaccustomed to rowing rows for a time; there is a sensation of fatigue and stiffness in the muscles and the arms are seen to be congested. This fatigue stiffness passes away if the person keeps on rowing or raises his arms above his head. It is not the fatigue of real exhaustion, but is the result of an oversupply of blood in the parts. This physiologic phenomenon is the basis of his treatment for contracture in hemiplegia. The aim is to expel the blood from the arm and then exercise the muscles. The contracture subsides more or less completely after an Esmarch bandage is applied to the upper arm, and the muscles can then be exercised. The bandage is removed with the arm raised; sometimes it is best to defer the exercises until after the bandage has been removed. Afterward the arm is worn in a sling or kept supported high or frequently lifted, striving to ward off local congestion. It is frequently found that the paralysis is not so severe as supposed before the contracture was cured, so that the patient recovers the use of the arm. He relates one typical case out of his experience: A mason of 54 had recovered to some extent from hemiplegia nearly two years before, but his right arm was worse than useless, the contracture forcing the nails into the palm so that abscesses formed. The man had been constantly under medical care and was able to walk with a cane. Under three months of the induced anemia and exercise treatment the contracture was so far cured that he can use his hand in dressing and eating, the improvement persisting to date and even progressing. Unfortunately, von Criegern adds, the method can not be applied so well to the leg, as it is difficult to keep it raised to expel the blood, but the attempt should be made and much can be accomplished by wearing a light elastic stocking. The principle of the treatment is exactly the reverse of hyperemic treatment; in its modest sphere it has proved remarkably useful in his hands, although of course it has no influence on the underlying cerebral lesions.

72. Cure of So-called Stenosis of the Pylorus in Infants.—A complete cure was obtained in the case described with lavage of the stomach, hot cataplasms and opium, three drops a day for weeks; water was supplied by rectal injection or saline infusion.

Jahrbuch für Kinderheilkunde, Berlin

January, LXIX, No. 1, pp. 1-128

73 *Conditional Reflexes in Children. (Bedingungsreflexe im Kindesalter.) N. Krasnogorski.
74 Albumin Content and Lymphocytosis of Cerebrospinal Fluid in Infants with Inherited Syphilis. (Eiweissgehalt und Lymphozytose des Liquor cerebrospinalis bei Säuglingen mit Lues congenita.) L. Baron.
75 Acute and Chronic Bronchiectasis in Children. W. Tschernow.

73. The Conditional Reflexes in Children.—Krasnogorski's article reviews what has been accomplished in Russia of late years in the study of the "conditional reflexes," especially at Pawlow's clinic. He has been studying them on children and describes the means by which he was able to record on the Marey drum the movements of the child's mouth and the swallowing movements—all expressions of reflex action in response to stimuli, such as the taste of honey, sound of a bell, tickling, etc. The mechanism of the conditional reflexes in children seems to be the same as in dogs, but the latter are more exact in their response to tones. It is impossible to induce the conditional reflexes during sleep, but study of them opens new horizons, he thinks, for research on the complex nervous phenomena in children, in their simplest form and by objective physiologic means.

Medizinische Klinik, Berlin

January 17, V, No. 3, pp. 79-116

76 *Atropin in Treatment of Bronchial Asthma. P. v. Terray.
77 Urticarial Affections. Wolters.
78 Foundation for the Biologic Mercurial Treatment of Syphilis. (Grundlagen der biologischen Quecksilbertherapie der Syphilis.) J. Citron.
79 Frontal Sinusitis. (Entzündung der Stirnhöle.) C. Ziem.
80 Medical Utilization of Ions. (Die Ionenlehre.) W. Böttger. (Commenced in No. 2.)

76. Atropin in Asthma.—Terray protests against the general neglect of atropin in treatment of bronchial asthma. As the affection is a neurosis, atropin is theoretically indicated, and he has witnessed excellent results from it in certain cases, although it is by no means a panacea in all cases. In one case he has succeeded not only in arresting the attacks with it, but the patient was improved so that there was no recurrence of the asthma for ten months, although the man had been constantly affected with it for twenty years. Atropin can be advantageously used as a substitute for or to alternate with morphin. He describes the cases of seven patients with severe asthma treated with atropin, the results quite encouraging. He prescribes the atropin in pills containing each 0.0005 gm. (1/120 grain) at first one a day, then after two or three days gradually increasing to a total of from four to six pills a day, and then gradually reducing the dosage to one pill a day. The atropin not only arrests an attack, but it seems to prevent recurrence. He never saw any ill effects from this dosage.

Monatsschrift für Geburtshülfe und Gynäkologie, Berlin

January, XXIX, No. 1, pp. 1-140

81 *Treatment of Placenta Prævia. B. Krönig. Id. H. Sellheim.
82 *Zinc Intoxication from Intrauterine Cauterization with Zinc Chlorid. (Ueber resorptive Zinkintoxication nach intrauteriner Chlorzinkätzung.) P. Buttersack.
83 The Toxicoses of Pregnancy. (Schwangerschaftstoxikosen.) O. O. Fellner.
84 Lack of Amniotic Fluid and Clubfoot. (Oligohydramnion mit Pes varus congenitus.) M. Mekerttschiantz.
85 Beriberi during Pregnancy and the Puerperium. (Klinische Beobachtungen über die mit der Schwangerschaft und dem Wochenbette kombinierte Kakke.) J. Ogata.

81. Treatment of Placenta Prævia.—Krönig's article is an open letter to Professor Martin prophesying that the latter will soon become converted to the necessity for more active measures in treatment of placenta prævia, especially for wider application of Cesarean section. Sellheim says the same, confident that the skill of the general practitioner can be trusted more and that it is a mistake to assume that he will infect

V 19

the patient if he makes an examination and tampons. Sellheim adds that he has recently operated on eleven women for placenta prævia who had mostly been examined or tamponed before they reached the clinic, and yet there had been no infection. His confidence in the general practitioners had not been misplaced, although, to be sure, his incision in the uterus had been extraperitoneal.

82. **Zinc Intoxication from Cauterization of Uterus.**—Buttersack reports the case of a young ii-para with chronic endometritis and recurring hemorrhages; a spontaneous abortion at the seventh week was followed by persisting hemorrhage which yielded to curettement. The physician in charge of the case advocated cauterization of the uterine mucosa to put an end to the hemorrhagic tendency, and in the course of five days he swabbed out the uterus three times with a 10, 15 and 30 per cent. alcoholic solution of zinc chlorid. Abdominal symptoms then developed, vomiting, nausea, pains in lower abdomen and stomach, insomnia, twitchings and symptoms of nephritis; after various remissions of the symptoms the patient succumbed sixty-three days after the cauterization. The kidneys showed signs of toxic nephritis and zinc was found in the urine, eschars and intestines. The nephritis showed an acute onset, then an apparently mild course interrupted by four acute exacerbations evidently due to reintoxication, as no external cause was evident. The first acute phase gradually became transformed into the chronic parenchymatous form with rising blood pressure and uremia. Then followed symptoms of secondary contracted kidney. There was difficulty in urinating, amounting once to complete retention, but there was no fever at any time. No therapeutic measures proved of any avail; it was impossible to reach the source of the constant reintoxication, as the zinc had evidently been conveyed through the lymph. There was no sign of inflammation in the peritoneum. It is possible that nephritis may have developed in other cases after zinc chlorid cauterization, the true source of the poisoning being unsuspected.

Münchener medizinische Wochenschrift

January 19, LVI, No. 3, pp. 113-160

86 *Constitutional Eczema in Infants. (Zur Klinik und Therapie des konstitutionellen Säuglingsekzems.) E. Feer.
87 *Treatment of Placenta Prævia and of Eclampsia. K. Baisch.
88 *The Ocular Tuberculin Reaction for Prognosis in Tuberculous Affections in Pregnancy. E. Martin.
89 *Predisposition of the Apices to Tuberculosis. (Die Disposition der Lungenspitzen zur tuberkulösen Phthise und das Lokalisationsgesetz des ersten tuberkulösen Lungenherdes.) C. Hart.
90 Determination of Hemoglobin and its Derivatives by Hemochromogen Crystals and the Lines in the Violet or Ultraviolet Part of the Spectrum. K. Bürker.
91 Experimental Research on Production of Atypical Proliferation of Epithelium. (Erzeugung atypischer Epithelwucherungen.) H. Stoeber.
92 Bordet's Pertussis Bacillus. (Keuchhustenbazillus.) G. Seiffert.
93 Suture of Lung to Arrest Hemorrhage. (Zwei Fälle von Lungennaht wegen schwerer Blutung.) Lotsch.
94 *Camphor in Alimentary Intoxication in Infants. (Anwendung von Kampher bei alimentärer Intoxikation des Säuglings.) A. Würtz.

86. **Constitutional Eczema in Infants.**—Feer distinguishes between "milk crust" and diffuse dry eczema. The former yields readily as a rule to regulation of the diet, restricting the proportion of milk to the minimum or suspending it altogether, giving instead flour gruel, strictly avoiding eggs and meat broths. A teaspoonful of uncooked fruit juice can be given occasionally to children four months old. As the child grows it requires a fruit and vegetable diet, the fruits and vegetables being strained through a sieve; no meat is given. The same measures also prove effectual in lichen scrofulosus, but the diffuse form of eczema without effusion is more rebellious. He does not advise local measures for the "milk crust," having observed after them febrile phenomena and even convulsions. He has even witnessed fatal heart failure and death in dyspnea with high fever and symptoms of intoxication. He has collected from the literature 30 such cases of sudden "eczema death," the underlying status lymphaticus predisposing both to infections and to sudden fatalities. In children with this constitutional anomaly, merely the rapid removal of crusts, the application of an irritating salve, a hot pack, subsidence of the eczema, etc., may entail a sudden fatality. He has had no experience with metastasis of the eczema, but has frequently noticed the subsidence of the eczema on the outbreak of asthmatic bronchitis, the two alternating. Local treatment of the eczema differs from that of adults only in the necessity for greater gentleness and caution.

87. **Treatment of Placenta Prævia and Eclampsia.**—Baisch regards the new operative era in treatment of these conditions as denoting marked progress. Instead of the old statistics of from 10 to 20 per cent. maternal mortality and from 70 to 80 per cent. fetal mortality, he states that with vaginal Cesarean section all the mothers were saved in a series of forty cases, and all but three of the twenty-two children were alive at birth. His communication issues from Döderlein's clinic at Munich.

88. **The Ocular Tuberculin Reaction for Prognosis.**—Martin applied the ocular tuberculin test to twenty-seven pregnant women with known tuberculosis. His aim was to determine whether the system could count on defensive processes or whether they were too weak to be of any avail. A positive reaction to the test he regarded as a good omen, accepting it as a sign that the defensive apparatus was actively functioning. A negative reaction, on the other hand, in the presence of clinically unmistakable tuberculosis, is an indication of exhaustion of the defenses, a sign that the pregnancy should be interrupted at once; freed from the stress of pregnancy the system may rally and conquer the tuberculous process, while otherwise it is doomed to succumb. Treatment on these principles has proved very satisfactory in his experience, and he urges the ocular test as a reliable means of determining the prognosis in such cases.

89. Summarized in THE JOURNAL, Oct. 10, 1908, page 1252.

94. **Camphor in Alimentary Intoxication in Infants.**—Würtz combats the collapse in infants with severe gastrointestinal derangement by injecting every three hours from 0.5 to 1 c.c. of a 10 per cent. camphorated oil. The injections are kept up until it is possible to supply food to restore strength to the heart. In one case he gave 59 injections in the course of ten days, saving the apparently moribund child. Saline infusion is liable to overburden the heart already sinking under its task, and thus to promote the fatal ending. In some instances he has known that saline infusion was the direct cause of the immediate heart failure, while camphor stimulates the respiration center, heart and vessel innervation, and raises the blood pressure.

Wiener klinische Wochenschrift

January 21, XXII, No. 3, pp. 79-114

95 Experimental Hypertrophy of the Heart. (Experimentelle Herzhypertrophie.) E. Mlesovicz.
96 The Opsonins During the Puerperal Process. J. Schiffmann and R. Cohn.
97 *Diagnosis of Malarial Splenomegaly. S. Kirkovic.
98 Study of Esbach Test for Albumin. (Zur Esbachschen quantitativen Eiweissbestimmung und über eine neue Kreatininverbindung.) E. Mayerhofer.
99 *Treatment of Tuberculous Children with Marmorek's Antituberculosis Serum Administered by the Rectum. F. Ganghofner.

97. **Diagnosis of Malarial Splenomegaly.**—Kirkovic presents arguments to prove that the affection known as Banti's disease has really been unrecognized malaria in a large proportion of cases, or, at least, what he calls a paramalarial condition. Malaria does not always induce a characteristic febrile syndrome, or the fever may have not been noticed by the patient. He tabulates the findings in a number of cases, calling attention to the small number of leucocytes and the preponderance of mononuclears in actual malaria, and the small number of leucocytes with lymphocytosis which is characteristic of the paramalarial condition. The latter findings with the history of the case and former residence in a malarial region confirm the diagnosis. The blood findings in this case suggest that the blood-producing apparatus is somewhat impaired, while the lymph-producing apparatus is still in good order.

99. **Marmorek's Antituberculosis Serum Administered by the Rectum.**—Ganghofner reports administration of this serum by

the rectum to thirty-two children at Prague. The results were disappointing, he says.

Zeitschrift für Geburtshülfe und Gynäkologie, Stuttgart

LXIII, No. 3, pp. 407-658. Last indexed Feb. 13, 1909

100 *Cesarean Section. Retrospect and Prospects. (Kaiserschnitt.) O. Küstner.
101 *Trials of Disinfection with Mixture of Acetone and Alcohol, According to von Herff. R. Oeri.
102 *Value of Pure Alcohol Disinfection. (Wertigkeit der reinen Alkoholdesinfektionsmethode.) R. Pfüsterer.
103 Relations of Head Tumor to Life of the Fetus. (Beziehung der Kopfgeschwulst zum Leben der Frucht.) K. Holzapfel.
104 Study of Corpus Luteum and Interstitial Tissue of Ovary During Pregnancy. (Corpus luteum und interstitielle Eierstocksdrüse während der Schwangerschaft.) J. Wallart.
105 Are Chorioangiomas True Tumors? (Sind die Chorioangiome echte Geschwülste? E. Gräfenberg.
106 *Experiences with Schauta's Method of Vaginoperoneal Plastic Operations. (Zur Interpositio uteri vesico-vaginalis.) T. Petri.
107 *Treatment of Hematocele After Extrauterine Pregnancy. (Behandlung der Hämatocele nach ektopischer Schwangerschaft.) O. Herbert.
108 Deventer's Visit to Copenhagen, 1689. E. Ingerslev.
109 Cyclic Transformation of Uterine Mucosa. (Cyklische Umwandlung der Uterusschleimhaut.) Y. Iwase.
110 Intraligamentary Ovarian Pregnancy. (Intraligamentär entwickelte Ovarialgravidität. mit Hämatombildung im Ligamentum latum.) J. Voigt.
111 *Care of the Umbilicus Omitting the Daily Bath. (Nabelabfall und Nabelheilung bei Fortlassung des täglichen Bades an der Hand 12jähriger klinischer Erfahrung.) E. Eicke.

100. **Cesarean Section: Retrospect and Prospects.**—Küstner reviews the various works that have issued from his clinic bearing in any way on this subject. During the last fifteen years he has had occasion to do or supervise Cesarean section in one hundred and four cases, including six in which the operation was done during or after death. This material is analyzed from various standpoints and the new phase into which Cesarean section has recently entered is discussed.

101 and 102. **Acetone-Alcohol Disinfection of the Hands.**—Oeri writes from von Herff's clinic to expatiate on the superior results obtained when the hands are disinfected with the Herff acetone-alcohol technic. The acetone dissolves fat and penetrates deep into the tissues and into the capsules of bacteria, while in combination with the alcohol it tans the surface and puckers up the crevices in the skin. It guarantees a freedom from germs that approximates asepsis, especially in the nail region, while the technic requires much less time than any other, the injury to the skin is less than with other technics, and the disinfecting effect lasts longer. The tabulated findings of numerous tests of the technic as applied in the clinic sustain his assertions. Acetone is comparatively inexpensive, mixes readily with water and alcohol while it hardens the tissues and is less inflammable than ether and benzine. The concentration recommended is a 50 per cent. alcoholic solution of acetone. The hands are washed quickly but not scrubbed, and then the acetone mixture is applied and rubbed in with flannel rags for four or five minutes. The hands feel smooth and dry. In 127 operations moist stitch holes were observed in only 2 per cent. Pfüsterer reports similar tests of disinfection with alcohol alone, his conclusions being that alcohol alone is suitable only for very brief operations; the nail region must be carefully attended to beforehand. He adds that it is an actual science to disinfect the hands properly, and that it has to be learned carefully and applied each time with the most scrupulous care and the closest attention.

106. **Utiization of Uterus for Plastic Operation on Vagina and Perineum.**—Petri has followed Schauta's technic in 14 cases, utilizing the uterus to make a new floor for the pelvis, covering it entirely with vaginal tissue. Two of the patients succumbed to intercurrent disease and in one case the uterus tore out of its new location, but the results were extremely satisfactory in the other cases, and he advocates this technic as offering many advantages for such operations on elderly women, except that it might be difficult to remove the uterus in case of cancer later. The details of the technic and of his cases are given in full.

107. **Treatment of Hematocele After Extrauterine Pregnancy.**—Herbert reports eight cases which demonstrate the importance of immediate operation in all cases of extrauterine pregnancy, never leaving to chance the disposal of the hematocele. Even after it has become encapsulated, fatal complications may ensue, repeated hemorrhages or infection, even weeks after the first hemorrhage. In one of the cases reported adhesions developed between the hematocele and the other sound tube, interfering with conception later. This case emphasizes particularly the necessity for prompt surgical intervention to prevent sterility later.

111. **Care of the Umbilicus.**—Eicke comments on the large proportion of fatalities among infants for which the umbilicus is responsible, and urges the necessity for treating it with as much care and protecting it against infection as scrupulously as any other wound. He is assistant at Küstner's clinic at Breslau where it is the practice to leave only a short stump to the cord and dress it merely with sterile cotton left for five days unless symptoms of infection develop, in which case alcohol gauze dressings, renewed daily, are applied. There have been 56 cases of febrile infection during the last 7,300 infants, that is, about 0.76 per cent. After the first cleansing bath, the infants are not bathed again until the cord drops off, except in asphyxia or pneumonia. The stump generally drops off by the sixth or seventh day. The umbilical wound is like an aseptic operative wound, and no one would ever think of exposing the latter to a daily bath, compelling frequent changing of the dressings. There is even less reason for the daily bath for infants during the first week after birth, especially in view of the conditions that generally prevail for bathing the baby and the opportunities for maltreatment of the healing umbilical wound, beside the damage from allowing it to get wet.

Riforma Medica, Naples

January 11, XXV, No. 2, pp. 29-56

112 Tumors of the Base of the Brain. (Tumori della base dell' encefalo.) G. Rummo.
113 Experimental Leucopenia. G. Lucibelli.

Books Received

All books received are acknowledged in this column and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. A selection will be made for review in the interests of our readers and as space permits.

GYNECOLOGIC DIAGNOSIS. By George Winter, O. O. Professor and Director of the Kgl. Universitäts-Frauenklinik in Königsberg, Prussia, with the Collaboration of Dr. Carl Ruge, of Berlin. Edited by John G. Clark, M.D., Professor of Gynecology, University of Pennsylvania. After Third Revised German Edition. Cloth. Pp. 670, with illustrations. Price, $6.00. Philadelphia: J. B. Lippincott & Co.

EXPERIMENTAL RESEARCHES ON SPECIFIC THERAPEUTICS. By Paul Ehrlich, M.D., D.Sc., Director of the königliches Institut für experimentelle Therapie, Frankfort. The Harben Lectures for 1907 of the Royal Institute of Public Health. Cloth. Pp. 95. Price, $1.00. New York: Paul B. Hoeber, 1909.

AN ANALYTICAL INDEX OF VOLUMES I TO X OF THE MEDICAL REVIEW AND A DIGEST OF THE FACTS IMPORTANT TO THE PRACTITIONER IN THE MEDICAL PERIODICALS OF THE WORLD, 1898-1907. Cloth. Pp. 201. Price, 7 shillings 6 pence. London: The Medical Review.

THE METHODS AND SCOPE OF GENETICS. An Inaugural Lecture delivered October 23, 1908, by W. Bateson, M.A., F.R.S., Professor of Biology in the University of Cambridge. Cloth. Pp. 49. Price, 50 cents. Cambridge: The University Press, 1908.

REPORT OF PROVISIONAL ADMINISTRATION FROM DEC. 1, 1907, TO DEC. 1, 1908, REPUBLIC OF CUBA. By Charles E. Magoon, Provisional Governor. Paper. Pp. 515, with illustrations. Havana: Rambla & Bouza, 1909.

TWENTY-FOURTH ANNUAL REPORT OF THE ADIRONDACK COTTAGE SANITARIUM, SARANAC LAKE, N. Y., November, 1908. With Medical Supplement. By Lawrason Brown. Paper.

NATIONAL ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS. Transactions of the Fourth Annual Meeting, Chicago, June, 1908. Paper. Pp. 352.

THE CHANGING VALUES OF ENGLISH SPEECH. By Ralcy Husted Bell. Cloth. Gilt Top. Pp. 302. Price, $1.25. New York: Hinds, Noble & Eldredge.

MISSOURI STATE SANATORIUM FOR THE TREATMENT OF INCIPIENT PULMONARY TUBERCULOSIS. Mount Vernon, Mo., November, 1908. Paper.

TONO-BUNGAY. By H. G. Wells. Cloth. Pp. 460. Price, $1.50. New York: Duffield & Co., 1909.

REPORT OF THE ALBANY HOSPITAL AND TRAINING SCHOOL FOR NURSES, 1908. Paper. Pp. 65.

TRANSACTIONS OF THE NORTH DAKOTA STATE MEDICAL ASSOCIATION, 1908. Paper. Pp. 191.

V 19